



# THE Business History REVIEW

**THOMAS R. NAVIN**  
**MARIAN V. SEARS**

**A Study in Merger: Formation of the International  
Mercantile Marine Company . . . . . 291**

**JAMES F. DOSTER**

**The Conflict over Railroad Regulation in Alabama 329**

**THOMAS C. COCHRAN**  
**RAY GINGER**

**The American-Hawaiian Steamship Company . . . 343**

**THEODORE F. MARBURG**

**A Study of Small Business Failure: Smith & Griggs  
of Waterbury . . . . . 366**

**BUSINESS HISTORY PROGRAMS**

**At AHA Annual Meeting . . . . . 385**

***Books Reviewed***

**ARE LISTED ON THE INSIDE FRONT COVER**

# The BUSINESS HISTORY REVIEW

*Successor to*

The Bulletin of the Business Historical Society, Inc.

Editor: GEORGE S. GIBB

HARVARD UNIVERSITY

## Editorial Board

ALFRED D. CHANDLER, JR.  
Massachusetts Institute  
of Technology

THOMAS R. NAVIN  
Harvard University

JOHN B. RAE  
Massachusetts Institute  
of Technology

Editorial Assistant: EILMA B. HOLTON

---

## Books Reviewed

	PAGE
Allan Nevins, <i>Ford: The Times, the Man, the Company</i> . Reviewed by Alfred D. Chandler, Jr. . . . .	387
Marquis James and Bessie Rowland James, <i>Biography of a Bank: The Story of Bank of America N.T. &amp; S.A.</i> . Reviewed by Ralph W. Hidy . . . . .	390
William S. Greever, <i>Arid Domain. The Santa Fe Railway and Its Western Land Grant</i> . Reviewed by Paul W. Gates . . . . .	391
Albert Virgil House, editor, <i>Planter Management and Capitalism in Ante-Bellum Georgia: The Journal of Hugh Frazer Grant, Ricegrower</i> ; Arney R. Childs, editor, <i>Rice Planter and Sportsman: The Recollections of J. Motte Alston, 1821-1909</i> . Reviewed by Reynold M. Wik . . . . .	392

[continued on inside back cover]

---

THE BUSINESS HISTORY REVIEW is published quarterly by The Graduate School of Business Administration, Harvard University. All editorial and business correspondence should be addressed to The Editor, 217 Baker Library, Soldiers Field, Boston 63, Massachusetts. Copyright 1954 by The President and Fellows of Harvard College. Printed at the Harvard University Printing Office.

By *Thomas R. Navin*

ASSISTANT PROFESSOR OF BUSINESS HISTORY  
AT HARVARD UNIVERSITY

*Marian V. Sears*

ASSISTANT IN COURSES AT  
HARVARD UNIVERSITY

## A Study in Merger: Formation of the International Mercantile Marine Company

*Generalizations about the merger movement in America at the turn of the century have too often been predicated upon inadequate information about the motives and mechanisms involved and the results achieved. This has been particularly true of those combinations in which the firm of J. P. Morgan & Company was involved. The International Mercantile Marine Company merger of 1902 has hitherto been misrepresented as a promotion of Wall Street. The subsequent course of this venture shows how even a combination of the world's most astute bankers and shipping men could be misled in analysis and held powerless to affect their own destiny by the march of economic and political events. Not all the grand combinations of the early twentieth century yielded lush promotional profits; neither should the evidence of overcapitalization in such combinations always be accepted at face value.*

Putting together the International Mercantile Marine Company was one of the boldest acts of enterprise in American business history. The purpose was to capture for American capital a dominant place in the busiest trade route of the modern world, the sea lanes of the North Atlantic, at a time when only a tenth of the foreign trade of the United States was carried in ships flying this nation's flag. The method was to combine in one large corporation four of the leading American and British steamship lines. The result was the world's largest shipping venture,<sup>1</sup> owning nearly a fifth of the nontramp tonnage of the North Atlantic trade.

Yet little is known about how this important shipping company, now called the United States Lines, came into being. The lack of

<sup>1</sup> *Annual Report of the Commissioner of Navigation* (Washington, 1902), p. 67.

information is not surprising; it is usual for merger negotiations to be conducted orally and in secret; by their very nature they leave no trace. Time also has served to obliterate part of the story, for none of the principals immediately connected with the merger is now alive, and none of their descendants with whom we have talked is familiar with what took place.

The accepted version of the IMM merger runs something like this. J. P. Morgan, the great New York financier, as a result of his frequent voyages to England and the continent, conceived in 1902 the idea of a huge shipping combine, similar to the great industrial mergers with which he was familiar in the United States. His motives, so the story goes, were four. (1) He expected to earn for his firm a handsome fee for floating an issue of new securities — the more securities the better. (2) He was ambitious to accomplish ever bigger things in the business world. (3) He imagined that a dominant shipping company in the North Atlantic would bring stability to an admittedly unstable industry. (4) He believed that by reason of its dominant position the shipping merger would earn large profits for itself and its promoters.

These profits, it has been assumed, were to come from four sources: (1) "control" by IMM of shipping rates in the North Atlantic; (2) close tie-in between IMM and the American railroads over which Morgan exercised "control"; (3) close tie-in between IMM and the United States Steel Corporation, since Morgan, instrumental in forming both companies, would be in a position to dictate the policies of both enterprises; and (4) a federal operating subsidy, whose passage by Congress the IMM sponsors would promote. In addition, profits were expected to arise from efficiencies of consolidation and large-scale operation, including rearrangement of schedules, streamlining of management, and avoidance of duplicating services.

This version of the story is the guesswork of outside observers. Of the insiders the German, Albert Ballin, has left the fullest account of what took place,<sup>2</sup> but even that is full of speculation, since Ballin was not in a position to know all that went on. The *Report of the United States Commissioner of Navigation* for 1902 contains many pages of details concerning the industry and the merger, but much of the report is based on secondary sources. The conclusions that have been drawn from existing materials have seemed plausible enough, but a further examination, aided by new materials, raises the possibility that the participants in the IMM merger would them-

<sup>2</sup> Bernhard Huldermann, *Albert Ballin* (New York, 1922).



selves have viewed with amazement this interpretation of their actions and motives.

In the process of effecting the merger, substantial accounting data had to be analyzed and recorded. This work, by the auditing firm of Price, Waterhouse & Company, has been preserved, and these figures, when submitted to close scrutiny, can be made to yield a wealth of information hitherto unpublished.<sup>3</sup> Combined with already published data and checked with the firm of J. P. Morgan & Company, this information has been set forth in case form for teaching purposes in the Business History course at the Harvard Graduate School of Business Administration. The present article does not attempt to repeat that material but rather draws some general and tentative conclusions from what is still and probably always will remain an uneven and insufficient body of evidence.

Specifically the following points seem to us, as a result of our study, to be valid, or at least plausible, though at variance with the accepted version of what happened. The International Mercantile Marine Company began as essentially a shippers' merger and not a bankers' merger. The merger probably would have come about even had Morgan not been interested in railroads and the country's largest steel company. It was a merger in which control of North Atlantic shipping was sought not by Morgan but by the shippers — and not so much by the American shippers as by the European. In the formation of this merger it is true that an American subsidy was counted on, but, as events turned out, the failure of Congress to pass a subsidy bill, far from deterring the merger, made it all the more inevitable. It is also true, as has sometimes been alleged, that high prices were paid for the component lines and that British sentiment was unexpectedly vocal against the merger. But Morgan went ahead with the merger in full knowledge of these deterrents, although aware in the final stages of negotiation that his firm probably would suffer financial loss as a result. An understanding of these seemingly inexplicable actions can be gained only from a flashback to the circumstances immediately preceding the merger.

• • •

Important as was J. P. Morgan to the completion of the IMM merger, he occupied in the early stages of negotiations what can best be described as a collateral position to a Philadelphian named Clement Acton Griscom. Griscom, who probably initiated the idea of

<sup>3</sup> Unless otherwise stated, most of the statistical material is from reports of Price, Waterhouse & Company, or its affiliate Jones, Caesar & Company.

the transatlantic American shipping combine, was the person who had most to gain in such a venture, since his own unprofitable shipping line would be merged into a new, profitable undertaking.

At the turn of the century Griscom was without question the key figure in American transatlantic shipping,<sup>4</sup> a distinction easy to assign since there was only one other contender for the title, Bernard N. Baker of Baltimore's Atlantic Transport Company. These two men had figured prominently in the relatively small amount of transatlantic shipping business controlled by American citizens during the last half of the nineteenth century. The location of Griscom and Baker in Philadelphia and Baltimore — when the port of New York accounted for more North Atlantic trade than all the other East Coast ports combined — told a story in itself.

For a number of years after the Civil War the only Americans who had taken an active interest in North Atlantic shipping had been the railroad executives whose lines did not terminate at New York harbor. In New York there had been no need for railroad men to foster the ocean-going trade; there had been any number of foreign companies providing shipping service both of the scheduled and of the tramp variety. In Philadelphia and Baltimore, however, the rail lines had had to encourage an ocean-going traffic in competition with the port of New York. In Philadelphia the sponsoring railroad had been the Pennsylvania; in Baltimore, the Baltimore & Ohio, and later the Pennsylvania as well. By 1900 the shipping companies which had started in those two cities had both added New York as a terminal port, but their headquarters remained in Philadelphia and Baltimore, respectively.

Griscom's Philadelphia steamship venture, the International Navi-

<sup>4</sup> Clement Acton Griscom was born in Philadelphia in 1841 of an old Philadelphia family of some means. He attended a Quaker school, and at 16 became a clerk in a firm of shipping merchants, Peter Wright & Son, advancing to partnership at 22. He devoted his life to the shipping business and became one of the wealthiest men of the country. After the mode of the time, he owned a large country estate, collected paintings, owned a private railroad car, and operated an ocean-going steam yacht. Besides his shipping interests, he became a director in some 25 enterprises, the more important, aside from the IMM, being the Pennsylvania Railroad and the National Transit Company, the largest of the Standard Oil pipeline companies and a firm in which he occupied the honorary position of president. In addition he was influential in the Republican Party. Although New York became important as a center of his business interests, he continued to reside near Philadelphia.

He traveled widely, and customarily spent several months abroad each year. As a result of his international shipping connections, both Germany and Belgium awarded him decorations. He was 61 in 1902 when he became president of the IMM. He died 10 years later.

gation Company (N.J.), conducted a three-part operation in 1900. The company itself ran a small fleet of ships under the United States flag between New York and Southampton. In addition it owned two subsidiaries, one British and the other Belgian. The British subsidiary, International Navigation Company, Ltd., ran between Philadelphia and Liverpool. The Belgian company, launched with the support of Belgium's promoter-minded king, Leopold II, ran from Antwerp to Philadelphia and New York. Of the three operations, the European were profitable; the American was not.

Griscom's chief claim to national fame before 1900 had been his work on behalf of strengthening the American merchant marine. Largely because of the relatively high cost of building and operating ships under the American flag, this country's merchant marine had fallen to an insignificant position in foreign trade. Convinced that its vast industrial potential would soon make the United States the dominant factor in world trade, Griscom lobbied year after year for federal shipping subsidies. In 1891 he had been instrumental in obtaining a postal subsidy for ships under the American flag and in the following year he had transferred from British to American registry two of his newest vessels — both British built. (Behind this transfer of registry was the British refusal to pay subsidies to vessels — even British-built ones — when the owners were Americans.)

In gaining congressional approval for the transfer, Griscom had to promise to order two similar ships from American yards. These ships — built at a cost approximately 30 per cent over what they would have cost in a British yard — proved to be money-losers. The American operating subsidy, while generous in theory, proved difficult to earn. High speeds were demanded and a stand-by ship was necessary to maintain schedules. In only one year did Griscom's line qualify for the full \$750,000 to which it was theoretically entitled.

Unable to pay dividends on either his preferred or common stock, Griscom returned to Congress for a more liberal subsidy act. At the time of the merger proposal he seemed to be nearing success. The presidential message to Congress in December, 1899, took an official stand in favor of government aid to shipping.

Meanwhile, international circumstances were altering the nature of Griscom's problems. With the outbreak of the Spanish-American War in the spring of 1898, the United States government exercised its right to charter for naval duty four of Griscom's American-registered ships. For a few months these vessels saw heavy war duty and some were fired on by the Spanish. All were left in bad condi-

tion when returned to their owners late in 1898. The temporary incapacitation of these vessels and the transfer of other ships to the Pacific to take advantage of the Klondike gold rush left Griscom's operations seriously underequipped at a time when ocean traffic, especially in the grain trade, was becoming very active.

At that point Griscom's confidence in the future of American shipping led him to decisive action. Eager to maintain and if possible to advance his position in the North Atlantic trade, he repaired and refitted the vessels returned by the government and set out to raise funds to expand substantially his tonnage capacity. A logical source of capital was the private banking house of Drexel & Company, Philadelphia associate of J. P. Morgan & Company.

Early in 1899 the Drexel firm floated on behalf of the International Navigation Company (N.J.) a \$13,000,000, 5 per cent mortgage bond issue, of which approximately \$9,000,000 was intended to be exchanged for outstanding bonds.<sup>5</sup> The remainder was expected to pay about half the cost of constructing six new vessels, two in the United States and four in Scotland, all to be as large as or larger than anything International Navigation had previously owned. Among the new security holders were Philadelphia's leading street-car magnates, P. A. B. Widener and William L. Elkins. Both went on International Navigation's board. At the same time A. J. Cassatt, president of the Pennsylvania Railroad, left the board, although the relations of the two companies remained close, as was not uncommon for railroad and steamship lines.<sup>6</sup>

These ambitious plans for the future had scarcely been laid when Griscom received what must have been for him a startling piece of news. Bernard N. Baker of Baltimore's Atlantic Transport Company was rumored to be negotiating the sale of his line to a British enterprise, Frederick Leyland & Company, operator of the largest freight line in the North Atlantic. The rumored sale of Baker's line to a British company threatened one of Griscom's fondest dreams, a comprehensive merger of American shipping companies.<sup>7</sup>

• • •

Baker had been faced in recent months with problems somewhat like Griscom's but of different degree.<sup>8</sup> Like Griscom's International

<sup>5</sup> *The Commercial and Financial Chronicle*, 11 Feb. 1899, p. 282.

<sup>6</sup> "Steamship Lines as Extensions of Railroad Systems," *The Commercial and Financial Chronicle*, 16 March 1901, p. 507.

<sup>7</sup> *United States Investor*, 17 June 1899, p. 794.

<sup>8</sup> Bernard Nadal Baker was born in 1854 in Baltimore, which continued to be his home and the focus of his business activities. He studied chemistry at Yale, preparatory to entering the family chemical business, but soon shifted his

company, Baker's Atlantic Transport was a holding company with interests abroad as well as at home. Its domestic activities were restricted, however, to the operation of a storage and lighterage company in Baltimore harbor and an agency business for several other lines, including Hamburg-America; it ran no transatlantic ships under the American flag. In Britain its subsidiaries were the Atlantic Transport Company, Ltd., and the much smaller National Steamship Company. Although originally a Baltimore-to-London operation, the Baker company had added other terminals including Philadelphia and New York. Baker had been somewhat less interested than Griscom in mail subsidies because so many of his ships were freighters and therefore did not carry mail. For this reason his British company, a steady money-maker, had not become involved, as had Griscom's, in the controversy over British mail subsidies to American-owned companies.

Like Griscom, Baker was feeling the need for additional capital. Indeed, it seems apparent that one of the reasons inclining Baker to sell out to Leyland was his realization that, in the future, successful competition in the North Atlantic would require large amounts of capital to build new ships, and capital was something that John R. Ellerman, chairman of Leyland, had easy access to. At a time when mergers were occurring in many industries, Ellerman, although only 36, was taking a lead in the shipping industry<sup>9</sup> and in mergers of shipping companies. It was, therefore, in Britain

attention to shipping, incorporating the Baltimore Storage & Lighterage Company in his late 20's. Other business ventures included a coal distributing company in Baltimore and affiliation with one of the largest Pennsylvania coal producing companies. His business activities widened to include directorships in banks and other enterprises, and he became a trustee of Johns Hopkins. He also had broad social, artistic, and philanthropic interests. He traveled widely and became a close friend of Albert Ballin, the German shipping magnate. At the time of the formation of the IMM he was 48.

He continued his interest in shipping and the United States merchant marine after leaving the IMM. In association with Ballin he planned, but was unable to carry through, the establishment of an intercoastal line to use the Panama Canal when it was opened. Also, he was instrumental in establishing the United States Shipping Board in 1916 and was an original member and chairman. He died in 1918 at the age of 64.

<sup>9</sup> John Reeves Ellerman, an Englishman of German descent, was born in 1862. Trained as an accountant, he was affiliated with the industrial promoting organization that reorganized the Leyland Line after the founder's death. This connection gave him the opportunity, when he was about 30, to become financially interested in the company. With the ships he retained after the sale of his interest to Morgan (see footnote 21), he went on to establish the Ellerman Lines, still one of the largest freight shipping operations in the world, and to build up one of the largest British fortunes by the time of his death in 1933. His prominence in shipping led to his being knighted in 1905.



that the first decisive step was taken to effect a merger of American and British lines.

Ellerman was not primarily an operating executive, but rather a financial man, occupying somewhat the place in British shipping that Edward H. Harriman occupied in American railroad transportation. After the death in 1892 of Frederick Leyland, founder of the Leyland company, the line had become a public corporation, and within a short time Ellerman had obtained financial control.<sup>10</sup> He had expanded the line, principally by building new and larger cargo ships and partly through merger. The line had paid regular dividends, and its securities had acquired a high rating in the market. Its ships ran not only to ports along the upper coast of the North American continent, but to Lisbon and the Mediterranean as well.

Ellerman's proposal of a merger with the Atlantic Transport Company, Ltd., must have been made late in 1899 or early in 1900. The plan was boldly conceived. It would give to Ellerman three established lines serving the entire East and Gulf coasts of the United States. (Leyland ran to ports from New York northward; Atlantic Transport to ports from New York southward; and a third line to be included, the West India & Pacific Steamship Company, to ports in the West Indies and along the Gulf Coast.) The combine would mean for the 46-year-old Baker a relegation to the position of United States agent for the Leyland organization. However, an opportunity to be part of the Ellerman group and a prospect of exchanging Atlantic Transport shares for Ellerman securities may have been offsetting inducements. Early in March, 1900, word leaked out that the merger was expected to take effect the following May.

What next occurred is far from clear. By some means a move was initiated to prevent consummation of the Leyland-Atlantic Transport-West India merger. It is our belief that the initiator of the move was Clement Griscom, but we have found no direct supporting evidence.<sup>11</sup> It is apparent that the proposed Anglo-American merger went against everything Griscom stood for. Such a merger would permit a still further concentration of American shipping in British hands at a time when Griscom was of the strong opinion that the trend should be in the other direction.

<sup>10</sup> H. Osborne O'Hagan, *Leaves From My Life* (London, 1929), I, 384.

<sup>11</sup> There is a report that it was current criticism of Ellerman in the London *Financial Times* which caused Baker to grow wary and withdraw. (O'Hagan, I, 385-6.) Since greater accountability was attached to the issuance of a corporate prospectus in England than in the United States, it may be, as was currently reported, that "being advised of the heavy responsibility that would rest on him if he became a party to the prospectus of a new company as settled, [Baker] was unable to see his way to join the Leyland directorate." (*Fairplay*, 3 May 1900.)

Griscom looked on North Atlantic shipping as a profitable business in which Americans were not getting their share. Since the end of the Civil War the total volume of water-borne foreign trade had been steadily advancing. The rate of growth had been about \$40,000,000 a year, and there were prospects that this steady advance would continue indefinitely. (Actually in the next 15 years, 1900 to 1915, the average annual increase amounted to more than four times that much.)<sup>12</sup> True, this growth had not been yielding profits to ships operating under the American flag. But British lines had been faring well; quick to pull out of the depression of the mid-1890's, they had in recent years been earning handsome returns. Griscom's own British line had been prospering; it was his American operation that had been holding him back. The new subsidy bill was designed to remedy that situation.

Furthermore, a series of recent events must have seemed to Griscom to confirm his view that the United States needed a strong merchant marine. The Spanish-American War had shown the desirability of having under the American flag auxiliary vessels that could be converted to wartime use. The great upward surge of American exports from 1898 to 1900 had further emphasized the strategic advantage of a merchant marine operated for the advantage of American shippers. Griscom charged that British lines operated schedules to suit their own convenience and would not rearrange schedules or increase sailings to accommodate the growing American export business. In addition, the outbreak of the Boer War late in 1899 had diverted many British ships from the North Atlantic run and had driven home to American businessmen the vulnerability of an export trade dependent on ships of foreign nations.<sup>13</sup> For all these reasons Griscom must have believed that public policy and the business interests of the nation would be injured by the Ellerman-sponsored merger.

What action, if any, Griscom took to prevent the merger is part of the mystery. There is reason to believe that he approached Baker directly with a counter offer involving an all-American merger. If he was to dissuade Baker from dealing with Ellerman, Griscom must have recognized the need to offer an alternative source of funds.

<sup>12</sup> *Annual Report of the Commissioner of Navigation*, 1922, pp. 116-7.

<sup>13</sup> The current dearth of ships was reflected in the preamble of the Frye-Payne subsidy bill introduced in Congress in December, 1899 (Senate Bill No. 727), "Whereas the profitable employment of the surplus productive power of the farms, factories, mines, forests, and fisheries of the United States imperatively demands the increase of its foreign commerce . . ." (*Annual Report of the Commissioner of Navigation*, 1900, p. 65.)

Because of his recent dealings with Drexel & Company, Griscom may have discussed with that company the possibility of raising funds for Atlantic Transport to build additional tonnage. It is also possible that the Drexel partners, believing a further distribution of shipping securities in the Philadelphia market would be difficult to effect, were the ones who recommended that Griscom discuss the matter with their New York associate and partner, J. P. Morgan.

• • •

Apparently Morgan was impressed by the economic logic of Griscom's argument and by the profit outlook of the shipping industry. He agreed to consider the matter, and assigned certain junior members of the organization to conduct further negotiations.<sup>14</sup> On 3 May 1900, two days after the Ellerman-Baker merger was to have occurred, a newspaper article carried the announcement that Baker had withdrawn from the merger, but that Ellerman would probably go ahead and absorb the West India company into the Leyland Line<sup>15</sup> — as indeed happened. Baker soon thereafter began, and over the next seven months continued, a series of conferences leading to an expansion of his operating tonnage and a merger of his company with Griscom's International Navigation Company (N.J.).<sup>16</sup> These conferences involved, in addition to Baker and Griscom, P. A. B. Widener, who took a strong interest in the developing shipping picture, and several of the Morgan partners.

By December, 1900, an agreement had been reached whereby (a) Atlantic Transport would be merged with International Navigation, (b) Atlantic Transport would be permitted to order six new ships with funds advanced by J. P. Morgan & Company, and (c) two other companies (names at first not specified) would be added to the

<sup>14</sup> It was Morgan's practice to assign to juniors in his organization the responsibility for carrying through the detailed investigating and negotiating involved when he undertook promotion of an enterprise. It is likely, although not certain, that he assigned the task in this case to Charles Steele and George W. Perkins, for they became members of the board of directors of the IMM, and Steele was a member of the five-man voting trust and one of the three individuals, the others being the president and treasurer, to receive preliminary copies of Price, Waterhouse accounting statements. Steele had become a partner in March, 1900, and Perkins was admitted in January, 1901.

<sup>15</sup> *Fairplay*, 3 May 1900.

<sup>16</sup> Newspaper reports gave Baker a more important part in the early stages of negotiations than later on. In November, 1900, when there were rumors that a world-wide shipping combine was pending, Baker and Atlantic Transport were assigned leading roles. Alexander Brown & Company, bankers represented on Atlantic Transport's board, were reported to be principal financiers, with J. P. Morgan & Company also interested. And when the combine actually was formed in 1902, Baker was expected by some to be the president of the parent company.

merger. It is important to note that Atlantic Transport's new ships were to be built in the United States, the first the firm had ordered from shipyards on this side of the Atlantic Ocean. Apparently the intention was to have ships that would qualify for an American subsidy when the subsidy bill passed Congress. The decision to order American-built ships would seem to indicate a strong conviction by the Americans that a new subsidy was assured.

The proposed merger was to be conservatively capitalized — all common and preferred stock; no bonds. The preferred stock, 6 per cent cumulative amounting to \$75,000,000, was expected to have a market value of about par (\$100). Some of the preferred was to be used for acquiring shipping properties by direct exchange of shares; the rest was to be sold to the investing public to provide cash. The common, amounting to \$40,000,000 par, was to be treated as a bonus payable to the promoters and to those whose lines were being acquired; it was expected to have only nominal value and was to be regarded somewhat as an option on future earnings.

No figures have survived concerning the amount of preferred stock expected to be sold, but some informed guesses are possible. Perhaps as much as two-thirds of the preferred securities were to be exchanged for the stock of companies going into the merger and for the \$13,000,000 International Navigation 5 per cent bond issue recently sold by Drexel & Company. The remainder would be marketed by J. P. Morgan & Company. The cash so raised would then be used partly to repay the Morgan company for the money advanced on new ships and partly for working capital. Since the stockholders of some of the merging companies might insist on some cash, as well as preferred stock, in exchange for their securities, it was recognized that cash might be needed for this purpose as well.

The lines to be brought into the merger were four in number: International, Atlantic Transport, and, as it turned out, Leyland and White Star (Oceanic Steam Navigation Company, Ltd.). The expected cost of these lines, in preferred securities at par and cash (again no more than informed guesses), was as follows:

International Navigation Company (N.J.)	\$23,000,000
Atlantic Transport Company (W. Va.)	9,000,000
Frederick Leyland & Company (only the controlling stock of John R. Ellerman)*	3,500,000
Oceanic Steam Navigation Company (White Star Line)	24,000,000

\* The Leyland Line's securities (common stock, preferred stock, and bonds) had a market value early in 1901 of about \$15,000,000.

It may seem surprising to find Griscom and Baker planning a merger with Ellerman's line within nine months of the time when the Baker-Ellerman merger had been so abruptly terminated. The details of Ellerman's come-around are not clear. One of his associates wrote in his autobiography that Ellerman, a man not accustomed to being thwarted, had been infuriated by Baker's withdrawal.<sup>17</sup> But the principal facts are clear. Ellerman was essentially a financial man, not a shipping executive; unlike Griscom, he had no sentimental attachment to the shipping business and could therefore be bought out at a price. His concept of an integrated freight line with ports of call fanning out along the entire North American coast made good economic sense and was as advantageous to the Griscom-Baker combine as it would have been to the Ellerman-Baker consolidation.

It should be noted that the merger plans at this point (December, 1900) involved J. P. Morgan & Company only as bankers. The Morgan house was merely to advance the cash needed for new ships and arrange the sale of preferred stock. True, the Morgan partners, to expedite the merger arrangements, were to make available, if need be, their incomparable connections abroad, but the burden of negotiation was to be carried by the shippers themselves. Involved, of course, in the Morgan decision to act as banker was the conviction that the subsidy bill would be passed. If, however, the subsidy bill should fail, the Morgan firm could count on a lien on the new vessels as security for its loan and the profits of the British lines as support for the new issue of preferred stock. The principal responsibility rested with the shippers. But, as events were to prove, by the time the fate of the bill had become clear, the Morgan firm had become so deeply involved that it could not follow a passive course.

Dramatic as the merger proposal appeared to be when first revealed in the press, it was in its early stages a natural result of progressive developments in the shipping industry. At the heart of the merger was Griscom's idea that the two American-owned lines should be consolidated. Added to this core was the Ellerman concept that there should be a single freight company with ports of call along the entire North American coast. The final embellishment was the addition of the White Star Line.

Exactly how the White Star Line came to figure in the proposal is not known, but it was probably common knowledge in shipping circles at the time that it was for sale. The White Star's founder and chief owner, Thomas H. Ismay, had died in 1899, and his estate, which contained the largest single block of White Star stock, was

<sup>17</sup> O'Hagan, *op. cit.*, I, 386.



in process of being settled. There is no question that White Star was a choice piece of property and a desirable component to have in a merger. It was by far the most profitable British line operating in the North Atlantic, much more successful than its nearest rival, Cunard, which had been declaring meager dividends throughout the 1890's and in two of those years had passed its dividends completely.

The man who was taking the most active interest in the sale of White Star was William J. Pirrie, head of the prominent Belfast shipbuilding firm of Harland & Wolff and owner of the second largest block of White Star securities. Pirrie's concern over the disposition of White Star extended beyond his personal investment; the White Star Line was Pirrie's best customer. It may be, as has been intimated, that the Belfast shipbuilder had misgivings about the future of White Star under the management of J. Bruce Ismay, son of the founder.<sup>18</sup> Or it may be that he thought Bruce, in a desire to be free of managerial cares, might negotiate a sale of the line to interests inimical to Pirrie's shipbuilding company. Whatever his motives, Pirrie inserted himself actively into all discussions relating to White Star's future.

For special reasons, the settlement of the Thomas Ismay estate promised to be difficult. The share value, based on past earnings, indicated that the securities were worth nearly \$5,000,000 (par \$727,500). There had never been a public sale of White Star stock and consequently there was no established market.<sup>19</sup> Furthermore, each of the estate's 150 certificates was worth approximately \$32,000 (based on 1896-1900 earnings), an unmanageable size from a marketing standpoint. The estate's holdings would probably have to be sold as a block.

Despite these drawbacks the White Star Line represented an attractive piece of property. The company had been very efficiently operated and in recent years had been earning about 50 per cent more per ton than the more prosperous of the American-owned lines, Atlantic Transport Company, Ltd.<sup>20</sup> If complete ownership of the line was to be bought for \$24,000,000 in 6 per cent cumulative preferred stock, as the Americans proposed, the annual dividend

<sup>18</sup> *Fairplay*, 24 Sept. 1903, p. 470.

<sup>19</sup> A requirement of the company was that a stockholder wishing to sell his shares had to offer them to the company at par. (*The Times, Financial and Commercial Supplement*, 18 July 1904.)

<sup>20</sup> Figures for White Star from *The Times*, *op. cit.*; for Atlantic Transport Company from Jones, Caesar records.

payments would be \$1,440,000. The earnings of the line in all but one of the preceding 11 years had exceeded this amount.

Shortly after December, 1900, when the Morgan partners agreed to help raise money for a shipping merger, Baker left for London, ostensibly to attend a directors' meeting of the National Steamship Company, but also to reopen negotiations with Ellerman, this time as a purchaser instead of a seller. In London, he was assisted by J. P. Morgan, Jr., representing his father, and by Samuel Bettle, representing his father-in-law, Griscom. Morgan and Griscom remained in New York, where both were occupied with the merger of the United States Steel Corporation, which was then in progress.

As already indicated, the initial intent of the combine in acquiring Leyland was probably to purchase only Ellerman's controlling share of the company's stock; to have done so would have cost only about \$3,500,000 at current market prices. But the canny British financier drove a hard bargain. First, he exacted a price which was about a third higher. Secondly, he refused to accept any stock in exchange for his shares but instead held out for cash. Finally, he insisted that all other Leyland common stockholders be offered the same terms he was and that the preferred be offered at par. (No doubt Ellerman wished to have it known in financial circles that he was a man who looked after the interests of investors in his companies.)

So many Leyland shareholders accepted the Americans' offer that the total cost of the Leyland purchase was not \$3,500,000 but over \$11,000,000 — and this entirely in cash. Since formal arrangements had not yet been made to raise funds for the shipping combine, Morgan's London house, J. S. Morgan & Company, agreed to advance the sterling amount of the payment. Several directors of Atlantic Transport, Ltd., and International Navigation, Ltd., as well as Pirrie went on the board of Leyland, replacing most of the former board including Ellerman.<sup>21</sup>

• • •

With the Leyland purchase, Griscom's primacy in the proposed merger began to wane. The original idea may have been his, the planning, the assurance of managerial skill; but the principal responsibility had shifted. By April, 1901, the house of J. P. Morgan & Company, no longer merely a bank advancing credit and arranging

<sup>21</sup> Two parts of the Leyland Line the Americans did not buy: the Lisbon-Mediterranean and the Antwerp-Montreal services. Ellerman was allowed to buy the ships on those runs, but he was asked to sign an agreement that, except for the line to Canada, he would stay out of the North Atlantic trade for 14 years, a type of proviso common in merger agreements both then and now.

the sale of securities, had an \$11,000,000 investment, through its London affiliate, in the largest all-freight shipping company in the foreign trade of the United States.<sup>22</sup> Thenceforth, Morgan was to have a vital and personal interest in the outcome of the proposed venture.

Between the time when the Leyland purchase was proposed and the date of its consummation (summer of 1900 to 26 April 1901), the Morgan firm had undertaken and completed the merger of the United States Steel Corporation. Shortly after completing this merger, Morgan,<sup>23</sup> Griscom, and Widener joined Baker in London. Combining travel with business, these men made themselves available to consult with Pirrie, who was at the time acting as their agent in negotiating with the White Star stockholders.<sup>24</sup>

Pirrie's negotiations appear to have proceeded smoothly. The earnings record of the company was picked as the base on which to place a valuation. There was little alternative; no market price existed, and the book value of the assets was clearly meaningless, so extremely conservative had been Thomas Ismay's depreciation policies. One possibility was to value the stock on the basis of average earnings over the preceding five years — in all of which the company had earned substantial profits. However, a simpler base was finally chosen, one which was designed to give greater weight to the substantial tonnage put afloat by the company in the early months of the century. The new base was earnings for the single year 1900 with profits from the government charters for Boer War operations deducted.<sup>25</sup> The result was an earnings figure nearly a third larger than the average earnings for the preceding five years. This larger figure was then multiplied by 10 to give a base price. (In those days a corporation, especially a corporation in the transportation business, was not infrequently regarded as worth 10 times its earning power.) The resulting price was approximately \$32,000,000, or \$8,000,000 more than the Americans had expected to pay. This one-third in-

<sup>22</sup> *Annual Report of the Commissioner of Navigation*, 1902, p. 73.

<sup>23</sup> It was while Morgan was abroad that Hill and Harriman fought their famous battle for control of the Northern Pacific. Morgan was forced to return hastily to the United States because of his affiliations with the Hill interests.

<sup>24</sup> Pirrie had conflicting interests as a negotiator; as a White Star stockholder he would benefit from a high price for his shares, and as a representative of the purchasers he would be seeking as low a price as possible.

<sup>25</sup> In making this deduction, the negotiators clearly intended to arrive at a figure that would not be inflated by the abnormalities of war operations, but the shortage of ships in 1900 had resulted in unusually high commercial freight rates and therefore had produced abnormal profits quite apart from the profits of direct war work.

crease in the price of White Star was proportionate to the increase paid for Leyland and was perhaps an indication that Pirrie, knowing of the Ellerman price, had a feel for how high the Americans would go.

Unlike Ellerman, the White Star owners agreed to take 75 per cent of their payment in the preferred stock of the new combine, the rest in cash. In addition, they were to receive with each share of preferred a bonus of a half-share of common; it was recognized that the common stock had little value other than as a claim on future earnings and as the basis for control; the preferred apparently was accepted as having a value of par.<sup>26</sup>

In their negotiations the Americans recognized that the White Star owners would expect at least a 6 per cent return on the value of their property based on the last five years' earnings. This the buyers agreed to give in the form of 6 per cent cumulative preferred stock. While not guaranteeing to pay a 6 per cent return, the new American owners nevertheless agreed, in effect, not to take any money out of the company (in the form of common dividends) until the old owners had been paid (in the form of cumulative preferred dividends). Furthermore, the Americans agreed to give the old owners, in addition to the base price, a cash payment in recognition of the growth in value of the White Star property since 1900. This arrangement was to cost an additional \$7,000,000 cash over the base price. Finally, the old White Star stockholders were to receive an opportunity to share in the future growth of the IMM through a participation in the common stock.

While this arrangement seemed sound to the Americans, it was attacked by the financial press of London, when it became known the following year. The papers pointed out that the base year, 1900, was the most prosperous the shipping industry had ever known and therefore yielded a grossly inflated valuation. More devastating still, the press pointed out that a White Star stockholder could take just the cash offered by the Americans and could invest it in government securities which would give him as much return as he had been accustomed to receiving in dividends from the White Star Line.<sup>27</sup> This fact made the preferred stock as well as the common look like

<sup>26</sup> It was usual at the time for common stock in newly promoted mergers, even with a par value of \$100, to be assigned only nominal value. Sometimes, as in the case of the American Linseed Company, a merger of 1898 in which a share of common was given as a bonus with each share of preferred, the sum of the market prices of the two stocks in press comment was related to par of the preferred alone. (*The Economist* [Chicago], 24 Dec. 1898, p. 732.)

<sup>27</sup> *Fairplay*, 9 Oct. 1902, p. 555.

pure water. What the press did not know and what Thomas Ismay had taken pains to conceal was that White Star had been paying out in dividends only about 15 per cent of its earnings. The Americans simply proposed to start paying about 70 per cent. By this act alone, the market value of White Star's securities would be greatly enhanced. In addition the greater marketability of the combine's \$100 par preferred stock over the old company's \$32,000-a-share common was sure to contribute enhanced value.

The arrangements with White Star were tentative and subject to completion of the combine. Similar arrangements were made at the same time with two much smaller British companies operating the Dominion Line, which was chiefly a freight line to New England and Canada. By the end of June, 1901, the Americans were ready to return to the United States, their business abroad completed.

• • •

Meanwhile rumors that White Star was selling out to an American combine had begun to circulate in the trade and very quickly had reached the ears of Albert Ballin, the head of Germany's Hamburg-America Line, largest of all the lines then operating in the North Atlantic. Ballin was not one to remain idle while such important changes were occurring among his competitors, so he traveled to London to discuss the rumors at first hand with his friend Pirrie. From Pirrie he obtained an account of what had taken place between the Americans and the owners of White Star. Learning that the combine had not yet been formalized, Ballin proposed that some affiliation be arranged between the combine and the two leading German lines, his own and the North German Lloyd. Apparently Pirrie was impressed by the desirability of such an affiliation and late in July, 1901, sailed for New York to lay Ballin's proposal before Morgan.

It would appear that Ballin's proposal met with the ready approval of Griscom and Widener. To Morgan, however, the suggestion that the merger arrangements be altered did not seem wise, not at least until the fullness of an agreement with Ballin could be worked out. Morgan consented, however, to participate in a small syndicate consisting of himself, Widener, and Griscom, to purchase if possible in the open market a minority interest in the Hamburg-America Line. If these securities should not fit into the final merger scheme, Griscom and Widener agreed to buy them as a personal investment. Baker did not join this syndicate, perhaps because he lacked or did not wish to risk the funds. Purchases of Hamburg-America stock



were to be made by Ballin's personal brokers in Berlin and Vienna and were to be financed by J. S. Morgan & Company, of London. The operation was to be kept secret to prevent the price from rising. Nevertheless, word leaked out, precipitating a storm of anti-American protest in the German press.<sup>28</sup> It soon became apparent that the open purchase of stock was not going to be a satisfactory method of achieving a community of interest.<sup>29</sup>

Undaunted by this reversal, Ballin set about finding an alternative course. No doubt he feared the competitive might of the combine, but at the same time he knew that the combine would be happy to have some assurance on his part that he would be co-operative. What he was seeking was a division of traffic, with the Americans in command of freight and passenger business from the British Isles, and the Germans in command from the northern part of the continent. He therefore explored an area of agreement which would be satisfactory not only to the Americans and himself but to the North German Lloyd and to officials in the German government.

As a first price of co-operation Ballin insisted that the Holland-America Line of Rotterdam be neutralized. Though small in comparison with Hamburg-America or North German Lloyd, the \$5,000,000 Dutch line occupied a strategic position, for its connections with the inland commerce of Europe afforded shippers an alternative trade route to that commanded by the great German lines. Ballin obviously did not wish to tie his own hands (through rate agreements and area allocations with the Americans) only to have the Dutch undercut his business. It was therefore agreed, as a concession to Ballin, that Pirrie would approach the Dutch, for whom he had built ships, and would offer to buy a controlling interest in their line.

In negotiating with the Dutch, Pirrie did not reveal that the German lines were behind his move. He let it be known that he was speaking for the Americans and was authorized by them to make an arrangement that was mutually satisfactory. He left no doubt, however, that he considered it economic suicide for the Dutch to remain outside the combine. At first the Dutch were wary. They had taken pains in their charter to see that their line would not fall inadvertently into the hands of foreigners and they were understandably reluctant to let happen that which they had striven for so long to avoid. The board of directors split between those who feared the

<sup>28</sup> *Bradstreet's*, 23 Nov. 1901, p. 741.

<sup>29</sup> Eventually the private syndicate sold its Hamburg-America stock and dissolved, at a small profit to the participants.

Americans and wanted to join them and those who wanted to remain independent at all costs. The final decision was to send a representative to New York to discuss terms directly with the Americans.

• • •

Meanwhile months were passing. Between July, 1901, and February, 1902, there is no evidence of activity on the American side of the Atlantic. Only in Europe, where Ballin and Pirrie were continuing their efforts to enlarge the combine, does the available record contain any indication of what was taking place. It would appear that the Americans were still holding to their original idea of a freight line combination fanning out along the North American coast, with the high-grade passenger-freight-mail business of the White Star company added; it was the Europeans who were intent on enlarging the scope of the combine.

With their thoughts focused on United States shipping, the Americans were no doubt anxiously awaiting the outcome of the subsidy bill in Congress. The British and Germans also were watching the progress of the American bill, fearing the added competitive factor its passage would entail.<sup>30</sup> The earlier congressional session, ending in March, 1901, had failed to act, but the new session, due to open in December, 1901, was certain to take up the measure.

By February, 1902, with Congress in session and strong pressure behind the bill, the Americans at last called a series of meetings of many of the leading executives of North Atlantic shipping to be held in the offices of J. P. Morgan & Company at 23 Wall Street. The purpose of these meetings was to make formal, though still tentative, plans for the merger. Agreements covering the general provisions were reached on 4 February but were not made public for several months.

It is impossible to give an accurate summary of the complicated arrangements worked out in those meetings. In many instances merely an area of understanding was arrived at, with specific points to be settled later. However, the general provisions of the agreements can be described.

The merger was to use the charter of Griscom's International Navigation Company (N.J.); the name later was changed to International Mercantile Marine Company. Headquarters of the merger were to be in Philadelphia, and Griscom was to be president.

<sup>30</sup> The Hamburg-America Line was even reported to have plans to start a nominally American line that could qualify for the subsidy (*Fairplay*, 1 Jan. 1901, p. 21) and the British government was re-examining its policies with relation to subsidies.

Holders of International Navigation's 8 per cent preferred stock were to get a share-for-share exchange for new 6 per cent cumulative preferred stock in the renamed company, and common stockholders one-half share of new common for each old share. (See Table 1.) Baker's stockholders were to get cash for declared but unpaid dividends, plus three shares of preferred and one of common for each common share — in recognition of the better earnings record of their line. All thought of paying off the bonded indebtedness of Griscom's company was abandoned; the merger plans had come to require too much cash to make that plan practical.

The Leyland Line, control of which the J. P. Morgan partnership had acquired in April of the preceding year for approximately \$11,000,000, was to be purchased by the combine at cost plus 6 per cent interest.

The White Star Line was to be bought on the general terms already described, and the combine agreed to purchase the managing partnership which ran White Star's business affairs. This partnership, known as Ismay, Imrie & Company, was highly liquid and was probably worth, in current assets and trade connections, the \$5,000,000 to be paid for it. Purchase was on the same basis (part cash, part preferred, and a bonus of common) as that worked out for White Star.

A similar purchase arrangement was worked out for the Dominion Line. This line had had an unprofitable history, but its assets were considered a good buy at \$4,500,000. Its managing agency, Richards, Mills & Company was also to be bought, at a price of about \$1,000,000.

In addition, the combine agreed to take over from J. P. Morgan & Company the loan which the banking house had made to Atlantic Transport for new tonnage. The other lines also had commitments outstanding for the purchase of new ships. The total of these commitments, including the Morgan loan, amounted to nearly \$17,000,000 and brought the combine's initial cash needs to \$50,000,000, or approximately twice the amount originally estimated. Because such a sum of money could not easily be obtained by the sale of preferred stock, the original plan was dropped, the amount of preferred to be issued was reduced, and \$50,000,000 of 4½ per cent collateral trust bonds was added. With bonds placed senior to the preferred stock, the preferred now was expected to sell at a price substantially below par.

For their part in bringing about the merger, some of the shipping executives were to be paid a bonus in preferred and common stocks

of the new venture. The principal recipients were Griscom, Widener, and Baker, although some of the English executives of Ismay, Imrie and Richards, Mills also were favored. Conspicuously absent from this bonus list were Pirrie and Ballin. Pirrie's compensation for work on behalf of the merger was simple enough; the combine

TABLE 1  
INTERNATIONAL MERCANTILE MARINE COMPANY  
INITIAL DISTRIBUTION OF CASH AND STOCK, 1902

Company	Cash *	Preferred Stock (\$100 par)	Common Stock (\$100 par)
International Navigation Co.	—	\$ 9,205,000	\$ 2,500,000
Atlantic Transport Company	\$ 450,000	9,000,000	3,000,000
F. Leyland & Company, Ltd.	11,964,275	—	—
White Star Line	15,131,651	24,502,358	12,251,179
Ismay, Imrie & Company	2,491,923	2,469,206	1,234,603
Dominion Line	1,916,890	2,524,305	1,262,153
Richards, Mills & Company	611,681	464,186	232,093
Organization Expenses	652,429	—	—
Balance for New Ships	16,781,151	—	—
Bonus to Shipper-Promoters	—	1,701,138	4,453,069
Commission to J. P. Morgan & Co.	—	500,000	5,000,000
Bonuses to Bond Underwriters	—	2,000,000	20,000,000
Stock Not Issued	—	7,633,807	10,066,903
Total	\$50,000,000	\$60,000,000	\$60,000,000

\* Proceeds from sale of bonds to underwriting syndicate.

agreed to buy ships from no other European shipbuilder. It could, however, buy from yards in the United States.

For their part in raising \$50,000,000 in cash, the partners of J. P. Morgan & Company received a managers' fee of 5,000 shares of preferred stock and 50,000 shares of common. Since the preferred stock was expected to sell for about \$85 and the common for about \$35,<sup>31</sup> the anticipated market worth of the Morgan firm's fee may be set at \$2,175,000.

The cash cost of organizing the combine turned out to be \$652,429. Of this amount by far the largest sum, \$392,788, was required to pay the British transfer tax on securities changing hands in Great Britain. The legal fees, despite the complexities of the merger, amounted to only \$109,852.

<sup>31</sup> Typical of press speculation on the expected market prices of the IMM preferred and common were 80 and 30, respectively (*Wall Street Journal*, 12 May 1902), and 90 and 40 (*United States Investor*, 26 April 1902). U. S. Steel had been selling in the 90's and 40's throughout April, 1902.

The Holland-America Line, it was agreed, was not to be brought into the merger, but was to be controlled beneficially for the combine. Control was obtained by two means. The Dutch company was induced to increase its capital stock by 50 per cent.<sup>32</sup> This new issue was then purchased at par for cash by Hope & Company, bankers of Amsterdam, acting for Pirrie's company, Harland & Wolff. The remaining stock necessary to bring the total holding to 51 per cent was bought from R. Mees & Sons, a Dutch investment banking house that had floated a recent bond issue for Holland-America and presumably had received the stock as part of its commission. Van den Toorn, one of Holland-America's managing directors and among those present at the New York meeting in February, 1902, went away from the meeting under the impression that Harland & Wolff was going to retain the controlling interest on behalf of the combine; he did not learn until later that control was destined to be divided three ways, with J. P. Morgan & Company owning one-half and each of the Dutch company's German arch-competitors, a quarter.<sup>33</sup>

The two German lines, both represented at the New York meeting by their chief executives, were to be allied with the combine only in a profit-sharing way. A complicated proposal was worked out whereby, in effect, the Americans and Germans agreed to co-operate on rates and routes provided the Germans would pay to the combine one-fifth of all dividends declared in excess of 6 per cent on their common stock. For their part, the Americans agreed to pay one-fifth of the amount required to bring the Germans' dividend rate to 6 per cent should it ever fall below that figure. Since the Germans had for several years been paying dividends well above 6 per cent, this arrangement was doubtless intended to favor the Americans. Apparently the Germans were willing to pay the combine a price for its co-operation as a means of seeking some measure of protection against whatever competitive thunderbolts the combine might throw into the North Atlantic trade.

The total capitalization of the combine was set at \$50,000,000 in bonds, \$60,000,000 in preferred stock, and \$60,000,000 in common. (See Table 2.) When these figures were announced, newspaper writers began to refer to the merger as a \$170,000,000 venture, and some of them compared this enormous figure with the very much smaller one which they obtained by adding the capital stocks of the component companies. For several reasons, however, this exercise led

<sup>32</sup> S. F. Van Oss, *Effecten Boek voor 1920* (Groningen, P. Noordhoff).

<sup>33</sup> M. G. DeBoer, *Holland-America Line 1873-1923* (Rotterdam, 1923), 67.



to exaggerated conclusions. Usually financial writers employed only the stated capital of the component companies without adding the surplus and reserves, as they should have. White Star, for instance, had substantial surplus and reserve funds; the total of its reserve fund, repairs and renewals fund, and surplus was more than twice its stated capital.

Price, Waterhouse & Company later tackled the problem of assigning realistic values to the component properties, a task which caused the auditing company dismay at the imprecise accounting methods employed by some of the lines.<sup>34</sup> The auditors came up with a figure of about \$65,000,000 for the depreciated value of the combine's tonnage (Leyland and National not included because not wholly owned and not consolidated on the balance sheet). To this figure should be added approximately \$10,000,000 for other physical assets and net working capital. A conservative valuation of the component properties of the merger as of December, 1902, would therefore be about \$75,000,000 (again Leyland and National not included).

This figure should be compared not with \$170,000,000 but with \$83,700,000, the cost in cash plus the anticipated opening market value of the securities issued in payment.<sup>35</sup> Although higher by 10 per cent than the \$75,000,000 valuation, the price paid for the component properties plus the bonuses was not unreasonably out of line with the depreciated cost.

Another way to appraise the value of the merger is the one employed by the bankers: earning power. For the five years before the merger the component companies, Leyland included, earned an average of about \$6,500,000 a year before depreciation.<sup>36</sup> A

<sup>34</sup> In their report to the directors of Atlantic Transport (W. Va.) accompanying the balance sheet for 31 Dec. 1903, the auditors pointed out that they had, the year before, given full instructions for adjustments of errors and for future treatment of accounts, but that the next year they again found them out of balance and had had to spend a week reconciling them. The errors, furthermore, had been numerous and for large amounts.

<sup>35</sup> The \$83,700,000 is arrived at in the following manner. From the \$50,000,000 bond issue should be deducted \$17,000,000 worth of new ships that had not previously existed. The part of the bond issue spent to acquire existing tonnage was therefore only \$33,000,000. From this figure should be taken the \$11,000,000 paid for Leyland, leaving \$22,000,000. Similarly a figure considerably less than \$60,000,000 should be used for the preferred stock issue, for nearly \$8,000,000 was not distributed. The remainder had an expected market value, at \$85 a share, of about \$44,200,000. Over \$10,000,000 of the common stock also was not issued, and the remainder had an estimated market value, at \$35 a share, of about \$17,500,000.

<sup>36</sup> *First Annual Report of the International Mercantile Marine Company, for the Fiscal Year Ended December 31, 1903*, p. 5.

reasonable depreciation would have been about \$2,500,000. The net would therefore have been about \$4,000,000. It was expected, of course, that after the merger this net would be substantially increased (1) through the economies of centralized administration, (2) by the growth of trade, and (3) as a result of the income derived from new vessels put into service. The new vessels alone were expected to add about \$3,000,000 to the net income.<sup>37</sup> But even if the level of earnings should not increase, the previous level was more than enough to cover the \$3,000,000<sup>38</sup> fixed costs of the merger, as shown below:

Bond Issue		Interest
\$50,000,000	4½% Bonds	\$2,250,000
13,785,000	5 % Bonds	689,250
Total		\$2,939,250

Interest would be "covered" about twice by earnings before depreciation. Earnings anticipated on the increased tonnage would have covered interest about three times. The Morgan partners must have considered this coverage sufficient, though it was hardly enough for a high-grade bond.

Payment of preferred dividends (at 6 per cent on \$52,000,000, the amount actually issued) would add another \$3,000,000 to the interest charges.<sup>39</sup> The sum of the interest and preferred dividend payments was greater than the \$4,000,000 average net earnings after depreciation but was less than the expected earnings once the new tonnage was in operation. The margin of earnings for the common stock would be small according to this calculation, but common dividends were expected to come from economies of consolidation, and from long-range growth of the shipping business.<sup>40</sup>

• • •

After reaching tentative agreements on how the merger should be put into effect, the various parties gave J. P. Morgan & Company until 30 April to organize a syndicate to underwrite the bond issue. At any time during the waiting period Morgan could withdraw

<sup>37</sup> First Annual Report, *op. cit.*

<sup>38</sup> There also were outstanding bonds in the subsidiaries, whose interest amounted to about \$150,000 a year.

<sup>39</sup> This figure does not include dividends on the minority preferred of Leyland.

<sup>40</sup> Widener was quoted in the *Wall Street Journal* of 2 Dec. 1902, as estimating that management economies alone would effect substantial savings. Press quotations gave unbelievably high estimates, some around \$10,000,000 a year.

from the tentative agreements, but the sellers could not. Morgan had to agree, however, that his firm would announce the formation of a syndicate within the waiting period or the merger would be called off. One of the reasons for this period of grace was the need to see whether Congress was going to act on the subsidy bill.

Forming a syndicate proved an easy matter. With the profits earned by participants in the United States Steel syndicate still a fresh memory, the problem was not how to get underwriters but how to allocate participation among those who wished to be included. Most of the underwriters were large insurance companies, trust companies, and very wealthy persons, including several Standard Oil officials.<sup>41</sup> A few individual participations, however, amounted to only \$1,000. Nearly 30 per cent of the underwriting was placed through J. S. Morgan & Company of London. Many of the bonds so placed went ultimately to Dutch investors.

Some of the American underwriters, especially the insurance companies, doubtless planned to buy the bonds for investment purposes. But the individual underwriters probably wished in most instances to participate only in the risk function; the house of Morgan would market the bonds for them, crediting their accounts with any profit earned. As compensation for bearing this risk, each underwriter of a \$1,000 bond would receive a .4 share of preferred and four shares of common (total par \$440). At anticipated market values, the bonds would sell for about \$975 and the bonus shares for about \$175, or a return of 15 per cent on the amount risked, a common rate on underwriting participations in those days. Nearly half the issued common stock was to be distributed by this bonus system. In other words, a substantial ownership in the merger would be held by those who put up the cash to make it possible.

Two developments caused Morgan to delay announcing the syndicate's formation. Foreign trade in the North Atlantic was becoming depressed after the spectacular boom in 1900 and a somewhat less profitable year in 1901. Shipbuilding had been overstimulated by wartime shortages, and the result was an excess of capacity in spite of the still large foreign commerce. In fact, the American ship subsidy bill of December, 1901, omitted the preamble to the earlier bill, which had suggested an intention to stimulate shipbuilding. Even during the February meetings, reports from shipping quarters had been unfavorable. In succeeding weeks the

<sup>41</sup> Among the investments of the Rockefeller Foundation about a decade later were IMM bonds of approximately the amount of John D. Rockefeller's original participation.

situation turned very much worse. At the end of March, 1902, Cunard announced that it was cutting its dividend rate in half and even then was paying out funds in excess of earnings.<sup>42</sup> With the prospect of poor earnings for the year, there developed doubts as to whether investors could be induced to buy the new combine's bonds at any price close to par.

A second source of concern to the promoters of the merger was the action of the Senate on 17 March 1902. The subsidy bill, supported by Marcus Hanna, had at length been passed and sent to the House, but only after several last minute amendments. Most serious of these was the one which denied a subsidy to any ship built abroad.

It is not certain the precise effect this amendment may have had on the plans of the Americans. It may be that they had planned to transfer to American registry only the mail ships of the White Star Line. Certainly they could not have expected White Star's mail vessels to continue earning British subsidies after Griscom's experience with British attitudes toward payments to American-owned vessels flying the British flag. But if the Americans had expected to transfer certain of their British ships to American registry as a means of benefiting from the American subsidy, their plans were shattered by this unexpected amendment.<sup>43</sup>

Three days later J. P. Morgan went to Washington to lunch with Senator Hanna. Presumably he wished to learn the Senator's opinion of the subsidy bill's chances of passing the House. Whatever the Senator may have said, his prediction was probably more optimistic than later events justified. So strong among Western representatives was the sentiment that such a bill would simply line the pockets of the rich men of Wall Street, that the bill was never reported out of committee.

These new developments presented Morgan with a Hobson's choice. If he allowed the waiting period to elapse without declaring the syndicate formed, he forfeited the work of a year and a half and gave up the chance of acquiring the White Star Line for American ownership. Furthermore, he could not back away entirely. His firm had \$11,000,000 tied up in the Leyland Line. If the merger did not go through, this investment would either continue to tie up a substantial block of the Morgan partnership's

<sup>42</sup> *Wall Street Journal*, 1 April 1902.

<sup>43</sup> Apparently there was basis for this expectation for Baker had said at an earlier date that if a subsidy bill passed, some of his British ships would be put under the United States flag, but if the bill failed to pass that the ships his line was building in the United States would be used in the protected coastwise trade.

liquid capital or have to be sold at a substantial loss. In addition there would still remain the problem of what to do with the American steamship lines. These companies had been engaged in a heavy building program, part of which had been financed by Morgan loans. Several of the new ships had been built at a relatively high cost in the United States in the prospect of a federal subsidy. If the subsidy should not be forthcoming even for domestic ships, the Americans would be faced with a situation even worse than Griscom faced during the 1890's, when his American operations ate up the profits of his European affiliates. Under these circumstances it was all the more important that the Americans be allied with British companies.

If on the other hand the syndicate was to be declared formed, Morgan faced the near certainty that, for the immediate future at least, he could not market the bonds underwritten by the syndicate. For the insurance and trust companies among the underwriters this eventuality would not be very serious. It would mean that they would have to put up cash for the amount of their participation, but many of them probably expected to do that anyway. They would have to pay a higher price for the bonds than market conditions warranted, but the security and yield of the bonds made them fairly good investments<sup>44</sup> and the bonus shares had some additional value.

For the individual underwriters, however, the decision to declare the syndicate formed carried quite a different meaning. Many of them, like Griscom and Baker, had taken large participations without, in all probability, giving thought to the chance that a Morgan syndicate might fail to be profitable. For them to put up the full amount of their participation would mean a serious strain. For Morgan, of course, the failure of a syndicate would mean an enormous loss of prestige.

In this situation the only man who could make the choice was J. P. Morgan. He was the one person in a position to call the combine into existence or let it lapse. If the combination was to be formed, it would be on Morgan's say-so; circumstances had forced the other promoters of the venture into positions of subordination.

Delaying his usual spring trip abroad until he had on hand all the available evidence, Morgan postponed the final decision. It was becoming abundantly clear that the British press viewed the

<sup>44</sup> Standard and Poor's "High Grade Corporate Bond Yields — Industrial" stood at 4.66% for April, 1902.

merger with open hostility. British pride had been stung by the threatened loss to the Americans of two of Britain's best shipping lines. Equally important to the British was the fear that a significant part of the United Kingdom's merchant marine might not be available for war service because of being owned by citizens of a foreign country.

Some commentators at a later date expressed the opinion that Morgan underestimated the force of British opinion, but the facts appear to be that he very carefully and accurately took the measure of his bargaining strength. By April, 1902, it seemed possible that he would want to have all the British ships in the merger remain under the British flag to benefit from lower operating costs and, if possible, be eligible for British subsidies. To achieve this end he was perfectly willing to concede that all British ships should remain British and be British-manned and available for wartime service — even though one of the reasons why Griscom had tried to increase the ship tonnage under the American flag was to free American commerce from its heavy dependence on British-operated lines. The device chosen by Morgan to preserve the all-British character of the merger's subsidiaries was to gather under Griscom's British subsidiary, the International Navigation Company, Ltd., all the merger's British-flag lines.

Finally, early in April, 1902, with mind made up, Morgan sailed for Europe. Rumors that a syndicate had been formed began to find their way into the press, and the announcement of a combine was made by Morgan in London on 18 April only slightly before the deadline. For better or worse the Morgan partners had committed themselves to finance the merger through the underwriting syndicate.

The project was put before the stockholders of White Star and Dominion for ratification early in May, and by the end of the month practically unanimous approval was reported. (Seventy-five per cent would have been sufficient to confirm the agreement.) Stockholders of Atlantic Transport and International Navigation were asked in June to turn in their shares in exchange for new stock.<sup>45</sup>

Meanwhile Morgan, in England in the spring and summer, was taking vigorous action to allay British fears and to make certain that White Star did not lose its British subsidies. He met with influential government officials and at the American Embassy dined with the King and Queen. Considering the forces ranged against him, he achieved a signal success. He also visited Germany and paid a personal visit to the Kaiser, presumably to make certain that

<sup>45</sup> Baker at the time was said to own over half the stock of his company.



there was no official opposition to the profit-sharing arrangement which had been worked out with the German lines.

These activities of Morgan were matched by the unexpected energy of the staid and proper executives of the venerable Cunard Steamship Company, Ltd., the most important competitor of White Star for passenger traffic. Although known for its Blue Ribbon winners, Cunard's Atlantic line was in size of operations not much larger in 1902 than Atlantic Transport's (although Cunard also ran lines to other parts of the world), and in profits it fell substantially below its competitors. Cunard does not seem to have figured in any of the early plans of the Americans if for no other reason than that its shares were too widely held to be easily acquired. Ballin is the one who seems to have insisted that the Cunard managers be approached by Morgan, and for a while there was a flurry of speculation in the press that Cunard would join the American combine.<sup>46</sup> In the end, however, the men at Cunard turned the situation to their own advantage by convincing the British government that they should be given special aid to combat the Americans. Modifying its laissez-faire policy, the government granted Cunard a special subsidy and a loan for shipbuilding purposes at an exceptionally low rate — 2½ per cent against the 4½ per cent bond interest paid by the American combine. It might be said, in fact, that the American threat and the advantageous use of that threat by the Cunard men permitted Cunard to proceed with a shipbuilding program that enabled it to compete for passenger traffic and mails on the terms most important at the time: speed, size, and luxuriousness of ships.<sup>47</sup>

The IMM was formally incorporated in October, 1902. Share exchanges and payments were completed in the final months of the year and early in 1903. Eventually all the shares of the American companies and White Star were acquired, and over 99 per cent of Dominion. Griscom became the first president, and Baker was on the directorate, although he resigned within a year. Voting control was vested in a five-man voting trust on which American financial interests had three representatives, Morgan, his partner Steele, and Widener. The British representatives were Ismay and Pirrie. A consolidated balance sheet as of 31 December 1902, is given in Table 2.

• • •

<sup>46</sup> Morgan, in a reported statement in April, 1902, had rather implied that Cunard would enter the merger eventually but that it would be better to delay until the corporate organization of the parent company had been completed. (*New York Times*, 22 April 1902, p. 8.)

<sup>47</sup> *Fairplay*, 5 Dec. 1912, p. 892.

The rest of the story is fairly familiar. After a period of high prosperity and active construction of shipping at the turn of the century (due principally to two wars: the Spanish American and the Boer), the shipping industry took years to recover its equilibrium, a situation which, while unforeseen at the time, has since come to be recognized as a natural postwar adjustment. The boom in trade which the Americans visualized eventually occurred. Indeed the volume of shipping in the North Atlantic between 1900 and World War I probably outdistanced the most sanguine of Griscom's predictions. But the early years of the merger saw trade between the United States and Europe become ever more unbalanced. As the New World increasingly supplied the Old with raw materials and food products, it reduced its dependence on the Old for finished goods and capital equipment. This growing self-sufficiency was hastened by a series of tariffs, of which the Dingley Tariff (in effect from 1897 to 1909) was by far the most protective the country had yet known.

The unbalanced flow of trade caused shipping lines with regular schedules, such as those in the American combine, to sail much of the time with inadequate cargoes. Under these circumstances the tramp steamers, with their ability to wait until loaded before they sailed and to go to whatever port seemed profitable, took the cream of the business, while the losses of the scheduled vessels rose with their Plimsoll lines.

It did not take long for these adverse economic conditions to bring strain and stress to the new transatlantic organization. Furthermore, many costs of operation were not reduced by the consolidation; some were even increased. Since the corporate entities of the various companies were preserved, many opportunities for savings through organizational simplification were lost. In addition, extra costs were incurred by the need to co-ordinate previously independent operations. Price, Waterhouse called attention to accounting errors arising because of the "want of touch which has existed between the different companies and has made the work of agreeing the various intercompany balances exceedingly difficult."<sup>48</sup>

On the other hand, some of the management's efforts to achieve economies were not cordially received. Especially critical were the minority stockholders of Leyland, who accused Griscom of administering the Leyland property to the special benefit of the combine

<sup>48</sup> Report to the president and directors accompanying the balance sheet for the year ended 31 Dec. 1903.

**TABLE 2**  
**INTERNATIONAL MERCANTILE MARINE COMPANY**  
**CONSOLIDATED BALANCE SHEET AS OF 31 DECEMBER 1902**

		<u>Assets</u>	
<b>Current Assets</b>			
Cash	\$	558,625	
Balance with J. P. Morgan & Co.		7,575,051	
Inventories		1,041,275	
Accounts and Bills Receivable		2,158,161	
Agency Balances, etc.		236,167	
Marketable Stocks and Bonds		3,092,015	
Total Current Assets			\$ 14,659,294
Cost of Properties			164,994,208
Investment in Other Companies			
F. Leyland & Company Ltd.			11,964,275
National Steamship Company, Ltd.			366,577
Deferred Charges			315,510
Suspense Account			107,207
Other			14,258
Total Assets			\$192,421,329
		<u>Liabilities</u>	
<b>Current Liabilities</b>			
Bills Payable and Loans	\$14,300,980		
Foreign Bank Loans	3,836,852		
Accounts Payable	2,377,686		
Interest Accrued	944,636		
National Steamship Company Account	507,418		
Reserves for Current Repairs, Claims, etc.	1,173,712		
Total Current Liabilities			\$ 23,141,284
Bonds and Loans of Constituent Companies Outstanding			1,619,038
Capital Stock of Constituent Companies Outstanding			7,044
<b>Bonds</b>			
5% First Mortgage Gold Bonds (International Navigation)			
Authorized	\$20,000,000		
In Treasury	6,215,000		
Bonds Outstanding			13,785,000
4½% Mortgage and Collateral Trust Gold Bonds			50,000,000
<b>Capital Stock</b>			
6% Noncumulative Preferred			
Authorized	60,000,000		
In Treasury	7,633,807		
Preferred Outstanding			52,366,193

TABLE 2 (continued)

Common	
Authorized	60,000,000
In Treasury	10,066,903
Common Outstanding	49,933,097
Surplus	1,569,673
Total Liabilities	\$192,421,329

SOURCE: Price, Waterhouse Worksheets.

and not that of the line itself.<sup>49</sup> The former White Star owners also protested vocally. "Their" line earned a substantial profit in 1903, but losses experienced by the other lines caused the parent company to pass dividends on both preferred and common stocks. Ballin added his voice to the criticism of Griscom's administration.

Finally, early in 1904 action became necessary. The former White Star owners were too powerful a group to ignore. Because of the terms on which they had sold their securities, they owned approximately 27 per cent of the common stock of the combine. (Total common stock owned abroad, including the bonus paid to European participants in the underwriting amounted to about 43 per cent.) Although the stockholders had no vote, their power being in the hands of a voting trust, one of the five members of the voting trust was J. Bruce Ismay, president of White Star. The pressure against Griscom became irresistible and he resigned as president of IMM, becoming chairman of the board, in which office he continued until his death in 1912.<sup>50</sup> Ismay became president in Griscom's place, and the headquarters of the company were moved from Philadelphia to New York. This episode is an ironical comment on the extent to which Morgan was able to exercise "control" through the mechanism of the voting trust. It would be interesting to know the thoughts of Pirrie, another member of the voting trust, on the elevation of young Ismay to the presidency.<sup>51</sup>

• • •

It also would be interesting to know how the various parties to

<sup>49</sup> *Fairplay*, 5 May 1904, p. 688.

<sup>50</sup> Relations between the Morgan and Griscom families remained cordial in spite of this shift in management. (Lloyd C. Griscom, *Diplomatically Speaking* [Boston, 1940], p. 324.)

<sup>51</sup> Nine years later, on the maiden voyage of White Star's proudest ship, the *Titanic*, Ismay was one of those aboard — and one of the few to be saved. Shaken and disgraced, he resigned from the presidency after several months and was succeeded by Harold Sanderson, formerly a partner in Ismay, Imrie & Company, and associated with the IMM from the start and vice president since 1906. Among those lost on the *Titanic* were Pirrie's nephew and Widener's grandson.

the International Mercantile Marine merger fared as a result of their dealings with the combine, but for the most part only guesses are possible. It is known that within a week of Morgan's announcement of the syndicate's formation, a call went out to the underwriters to put up 25 per cent of their commitments. Other calls went out from time to time as funds were needed, until by December, 1902, when the new company officially began operating, 80 per cent of the participation had been called in.<sup>52</sup>

With the shipping industry depressed and stock market reception for IMM securities doubtful, the promoters considered it impractical to make any public offering of the bonds to investors, and they made no application to list the securities on the Stock Exchange. Some stocks were dealt in off the Exchange, however, probably those received by former owners of the consolidating companies. The opening quotations, indeed, proved to be far below the prices anticipated when the purchase terms for the various properties were being negotiated. The preferred opened at about 55 in December and the common at 15, and both declined through the next year. Eventually 100 per cent of the syndicate participation had to be called in, and although the syndicate agreement was renewed not once but several times, no favorable market for the bonds appeared. Finally, in March, 1906, the issue was recognized as a failure and the bonds and the common and preferred stock bonuses were distributed to the underwriters.

The necessity to put up 100 per cent cash for their underwriting commitment caused grave hardship for Baker and Griscom. Doubtless wishing to show their unwavering faith in the venture, both men had taken heavy participations. Griscom was forced to strain his credit and the credit of his son<sup>53</sup> and Baker found it necessary to call on the corporate credit of the Baker-Whiteley Coal Company to shore up his finances.<sup>54</sup> Apparently these men were not alone. The financial press reported that the IMM syndicate calls forced New Yorkers to make heavy sales of choice corporate bonds to out-of-city investors, especially New England savings banks.<sup>55</sup>

<sup>52</sup> In the U. S. Steel syndicate, the maximum called had been 25%.

<sup>53</sup> Conversation of Thomas R. Navin and Ludlow Griscom, grandson.

<sup>54</sup> Just before the third syndicate call, bringing the total cash contribution to 80% of the subscription, the directors of the Baker-Whiteley Coal Company (of which Baker was president and which owned stock in the Atlantic Transport Company) voted to authorize Baker to use the stock it owned but which stood in Baker's name, to raise money "for the purposes of this company or for his own use. . . ." (Minutes of Directors' Meeting, Baker-Whiteley Coal Company, 8 Oct. 1902.)

<sup>55</sup> *United States Investor*, 27 Dec. 1902, p. 2,529.

Of the promoters, Baker probably suffered the smallest loss, for he withdrew from the syndicate before it was declared officially terminated. If he sold his securities at the highest quotations, he may have liquidated his participation (including the stock bonus he received as a promoter) without suffering much damage; at worst his loss may have amounted to a quarter million dollars. Whether he would have been better off to have remained an independent operator cannot be known, but it seems unlikely. Griscom's losses were certainly as large as or larger than Baker's; it is said that only his investment in Standard Oil securities brought him through the depression of 1907.<sup>66</sup>

The loss to J. P. Morgan & Company may well have amounted to between a million and a million and a half dollars. If, when the syndicate was terminated in 1906, Morgan had liquidated all securities received as commissions and as a participant in the syndicate, he would very nearly have broken even. But it is probable that he did not sell them then. If he had sold out between 1907 and 1913, his loss would have amounted to a million and a half dollars. If his firm had kept possession of its IMM bonds until 1941, when the last of them were retired, the loss would have been something less than a million dollars. Under any set of assumptions, it seems clear that Morgan did not come out ahead.

Of the underwriters (not including Baker, Griscom, Morgan, etc., who were both promoters and underwriters), those who liquidated their holdings between 1907 and 1913 (when IMM securities were selling at a steady low) lost up to a third of their investment. Those who held their securities until 1941 ultimately received par, but only after a long period of illiquidity.

The Germans both gained and lost from their agreement with IMM.<sup>67</sup> In the first ten years of the profit-sharing agreement, North German Lloyd on several occasions failed to pay a 6 per cent dividend. The total amount due to that company from IMM was approximately a million dollars. But the Hamburg-America Line turned in a much better performance, paid somewhat more than 6 per cent dividends and thus owed to IMM about the same amount as IMM owed North German Lloyd. From the standpoint of the American concern, the profit-sharing accounts very nearly canceled out. Hamburg-America, furthermore, whose tonnage nearly equaled

<sup>66</sup> Conversation of Thomas R. Navin with Ludlow Griscom.

<sup>67</sup> After the first year, there is little available information regarding the actual intercompany payments. There was a report in 1904 that modification had been made. (*Fairplay*, 1 Dec. 1904, p. 842.)



that of the entire IMM in 1902, continued at approximately parallel size until World War I.

It is pleasant to record that the Dutch, drawn into the Atlantic combine so reluctantly, came out of the experience with much to be thankful for. The cash which the Holland-America Line received from Harland & Wolff went to pay off the Dutch company's bonds. With no fixed charges and with economical operations, the company paid dividends averaging 10 per cent over the next 10 years. Shortly after the outbreak of World War I, Holland-America bought back from the Germans and the Americans their controlling interest. The price paid was about 12 per cent above the original sale figure.

Of the others who sold out to the combine, the Leyland owners fared best of all. At the peak of the market (1901) they had liquidated their investment in exchange for cash. No one could hope to do better. What they did with their cash is another matter, but if they followed the lead of Ellerman and invested in his new line, they did well indeed, for they received dividends of around 6 per cent from the first. Those who did not sell out but remained minority stockholders of Leyland received no dividends until World War I (1915).

Unlike the Leyland stockholders, White Star's owners would have been much better off had they not sold. They had a property easily worth \$32,000 a share and believed they were being paid for that property about \$50,000 a share in cash and securities. But the securities turned out to be worth considerably less than expected and so the value received was nearer \$25,000 (at average 1907-1913 market quotations). Had they *not* sold they might easily have continued to receive their regular dividends and might even, in view of their company's remarkable earnings record, have been able eventually to liquidate their holdings for as much as or more than the nominal \$50,000 paid for their shares by IMM. As it was they received half of what they had bargained for and no dividends at all; White Star paid dividends to IMM but IMM paid nothing.

It seems safe to assume that stockholders of International Navigation and of Atlantic Transport were destined for ill times in any event. Once they had committed themselves to an American ship-building program, they were lost without a substantial federal subsidy. There is no way of estimating what Atlantic Transport securities would have been worth in 1907-1913 had the merger not occurred, since separate financial statements are not available, but the owner of one share in 1899-1900 had a certificate worth approximately \$125, whereas by 1907-1913 the IMM securities which

he had received in exchange were worth about half that amount. It should be kept in mind, however, that, had Atlantic Transport not allied itself with the profitable White Star Line, the decline in value might have been even more pronounced.

The story since 1913 can be briefly told. In the fall of 1914 the uncertainties occasioned by the outbreak of World War I caused a sudden drop in shipping and reduced IMM to a condition of technical bankruptcy. Although the company had never paid dividends on either its preferred or common stock, it had, until that time, regularly paid its bond interest. With bankruptcy, the voting trust dissolved, and the courts appointed, as receiver, P. A. S. Franklin, manager of the New York office of the Atlantic Transport Line since before the merger and vice-president of IMM since 1902. Wartime prosperity, which soon followed, forestalled a thorough reorganization, however. In 1916 the receivership was terminated and Franklin became president.<sup>58</sup>

After World War I, the IMM adopted a general policy of liquidating its interests in companies operating under foreign flags and as a result disposed of its White Star properties. The combination of Cunard and White Star in 1934 put that organization ahead of other North Atlantic passenger lines and gave it a supremacy which it maintains even today. Meanwhile the IMM was acquiring a number of lines operating under the United States flag. Among these was the United States Lines Company. Finally, in 1943, the IMM dropped its "International" title and, in recognition of its all-American operations, took the name of its subsidiary to become the United States Lines of the present time. Thus was Griscom's goal ultimately achieved — an American shipping combine, with American capital and under the American flag.

• • •

The American shipping men had deluded themselves. They had imagined that the anticipated growth in North Atlantic trade would mean an increase in profits for their undertaking. They had also believed that a growing trade would rouse the American people to patriotic support of the merchant marine. On both counts they were wrong. The trade grew, but in an unbalanced way; and the subsidies came many years later in a year of depression, 1936. Yet, once deluded, the American shipping men had been caught. To turn back became impossible. The only course was to proceed with the merger no matter what the consequences.

<sup>58</sup> Franklin's son is today president of the United States Lines.

The financial backers of the enterprise were also caught. The Morgan partners had entered the deal as bankers. They had reviewed the Griscom proposal and no doubt had found to their satisfaction that it was soundly conceived. Then, unexpectedly, they had encountered the problem of paying cash for the Leyland purchase. In typical Morgan fashion they had agreed to advance the necessary funds; a sound decision, once made, was not something to set aside because of technical difficulties. But in truth the entire nature of the Morgan position underwent a change when the firm's own funds (and the funds of its depositors) became involved in the direct ownership of a freight line. Thereafter the banking house had no alternative but to interest itself directly in the shipping business.

Small wonder that outsiders have thought of the IMM as J. P. Morgan's brainchild. But the myth should not obscure the reality. It was a British accountant who set the transatlantic shipping fraternity agog with his daring plans for merger and it was two men from Philadelphia and Baltimore who seized the initiative from the British on behalf of American enterprise. The banker stepped in only when things began to go badly — when negotiations threatened to break down because of lack of cash and later when the economic tide began to ebb.

Once the idea of merger had started it gained momentum and for a time ran rampant. But the men who tried to promote a monopoly were shipping magnates, not the "Great Monopolist of Wall Street." True, Morgan did not oppose their activities, but he did very little to abet them. No doubt he was beginning to suspect that he had already overextended his commitments.

As for Morgan's motives in financing the shippers, he seems to have satisfied himself that they had a money-making proposition and therefore one in which the public would be willing to invest. It was as simple as that. The advantages that a strong shipping line might bring to American railroads and the steel industry may have played a part in his calculations but they certainly were not dominating motivations in his decision.

The prices which, with Morgan's concurrence, the Americans paid for the purchased lines were regarded then (and since) as extravagant. But two factors should be taken into consideration in judging the figures. Commentators usually valued the securities at par, whereas no one on either side of the bargain imagined these pieces of paper were worth their stated value at the time of the merger. Still, it must be said that the prices were generously computed.

The Americans were willing to pay for future value; it was part of the great American optimism of the times. Moreover, had they not paid what looked to be generous prices, the English would not have sold.

In two further ways does a study of the IMM merger serve to set aside historical mythology. The facts suggest that this was very far from being the old stereotyped plot about the wily banker and his unsuspecting dupes. So far as we have been able to learn, both Baker and Griscom blamed their disaster on outrageous fortune and not on supposed machinations by Wall Street. Morgan, too, had suffered. We must challenge the legend that the investment banking business at the turn of the century was virtually riskless. Here at last we have an opportunity to measure, even though roughly, what it cost in dollars to sponsor an unsuccessful issue. Far from earning an expected two million dollars, the Morgan firm lost an amount that may have been nearly as large — and tied up valuable funds indefinitely. The cost in lost prestige was of course inestimable.

By James F. Doster

ASSISTANT PROFESSOR OF HISTORY  
AT THE UNIVERSITY OF ALABAMA

## The Conflict over Railroad Regulation in Alabama

*A half century ago the conflict over state regulation of railroads was the chief issue in Alabama politics. Two staunch advocates led the rival forces. Both leaders were in agreement on the need to develop the industrial capacities of the state, but each sponsored violently opposing concepts of how this could best be done. The present article, by presenting the two sides of the Alabama controversy, provides us with insights into the national dilemma over government regulation of business which developed after the Civil War.*

The clash over railroad rates in Alabama in the early years of the twentieth century illustrates the problems of a community with an agrarian, colonial economy in seeking to obtain the benefits of industrial development. This article is concerned with explaining the two opposing positions, as espoused by Milton H. Smith, president of the Louisville and Nashville Railroad Company, and Braxton Bragg Comer, a successful merchant and industrialist, whose persistent advocacy of railroad regulation led, in 1906, to his election as governor of the state.

In Alabama in 1880, economic welfare depended almost entirely upon the cotton crop and its price per pound. The poverty of the state and the unfavorable outlook for agriculture caused great public interest in the development of local industries. But the local market was poor, capital was scarce, experience was lacking, and competition had to be faced in both local and distant markets. Nevertheless, strenuous efforts to promote industry were made by Comer, Smith, and numerous others. The years from 1880 to 1900 witnessed the growth of cotton and saw mills, mines, blast furnaces, and many other industrial establishments. The bulk of the population continued to be dependent upon agriculture, however, and wages in the new industries were too low to provide for more than the necessities of life. The old problems continued, despite much talk of the transformations wrought by industry.

The railroads were by far the largest industrial organizations in

the South. Their traffic in 1880 was chiefly of three types: cotton leaving the South for the Northeast and Europe, manufactured goods entering the South from the East, and bulky foodstuffs moving into the South from areas north of the Ohio River and west of the Mississippi. For these three trades large southern jobbing centers served as intermediaries in the movement of goods to lesser trade centers. In the years following 1880 the local centers rapidly established direct commercial and credit contacts with distant sources of supply and also tended to ship their cotton directly to distant markets.

Local railroad rates were based upon distance, each railroad having its own mileage rate scale. These local rates per mile were much higher for shorter distances than for longer. Superimposed upon the local rates, however, was the structure of rates between the basing points, which were originally the major trade centers on waterways. It was customary to make these rates low enough to get and hold the traffic in the face of water competition, even if they were not highly remunerative. Otherwise, the assumption was, the railroads would not get the traffic at all. Through traffic to local points was usually given the lowest combination of local and through rates. For example, the rate from Louisville, Kentucky, to Greenville, Alabama, a way station between Montgomery and Mobile, would be the rate from Louisville to Montgomery plus the local rate from Montgomery to Greenville or the rate from Louisville to Mobile plus the local rate back to Greenville, whichever combination might be lower. The basing point system resulted in rates which were usually higher for longer than for shorter hauls. When any railroad line cut the rates to a common competitive point, rival lines had to follow. Once a place had been given competitive rates, railroads found it practically impossible to withdraw them. Railroads, yielding to pressures, created many new basing points between 1880 and 1900, the attendant reductions in rates resulting in serious losses of railroad revenue.

The federal government, by the Interstate Commerce Act of 1887 and by the subsequent actions of the Interstate Commerce Commission, tried to eliminate long-and-short-haul discriminations, but met with bitter and successful resistance from the southern carriers, especially the Louisville and Nashville (L. & N.). Actually, the prohibition of pooling by the act intensified competition, which was the cause of long-and-short-haul discriminations.

The L. & N. had a main line extending southward from its headquarters city of Louisville to Nashville, Decatur, Birmingham,



Montgomery, Mobile, and New Orleans. Both north-south and east-west railroad lines, often in combination with cheap water transportation, presented strong competition at the points named and numerous others. The L. & N. found it difficult to operate upon agricultural traffic, its position being made especially difficult by the fact that the regions adjacent to its lines were largely mineral and forest areas, which were not productive agriculturally. Led by Milton H. Smith, the L. & N. was aggressive in developing mineral industries in Alabama, Tennessee, and Kentucky. Smith was particularly influential in the development of the Birmingham district. The company built spur lines to mines and furnaces and even invested money in coal and iron companies in order to develop its traffic. Its local rates on furnace material were the lowest reported rates in the United States, as low as 11 cents per ton for distances up to 25 miles. Smith devised a sliding scale of railroad rates on iron to northern markets: when the market price of pig iron went down, the rate went down, and as the price of iron went up, the rate went up.<sup>1</sup>

Before Smith became president of the L. & N. in 1884, the company had for a long time been recklessly managed. Its stock had been watered in 1881 by the declaration of a 100 per cent stock dividend. Following the custom of the day, the company had also heavily watered the stock of its branch lines in the Birmingham district. After Smith took control, the company was forced to issue new securities at a very heavy discount in order to extinguish a large floating debt. Beginning in 1894, however, the company adopted a conservative policy of accounting, and in 1905 Smith asserted that all the "water" had been squeezed out of the L. & N.'s securities by charging improvements to operating expense and paying only meager dividends. If his statement was true, the company had certainly been prosperous through the preceding 20 years.<sup>2</sup>

Construction of railroads and development of industry to produce traffic required large capital investment, and such investment re-

<sup>1</sup> See Jean E. Keith, "The Role of the Louisville and Nashville Railroad in the Early Development of Alabama Coal and Iron," in *Bulletin of the Business Historical Society*, XXVI (Sept., 1952), 165-74; Ethel Armes, *The Story of Coal and Iron in Alabama* (Birmingham, 1910), Chapters xvi, xvii, *et passim*; testimony of Milton H. Smith in *Hearings before the Committee on Interstate Commerce*, Senate Document 243, 59th Congress, 1st Session, p. 234.

<sup>2</sup> *Commercial and Financial Chronicle*, XXXI (9 Oct. 1880), 362, *et passim* in following years (see indexes); *Proceedings before the Alabama Railroad Commission at Montgomery, Ala., on April 3-6 and May 3-6, 1905, in the matter of Fertilizer Rates and on the General Revision of Freight Rates in Alabama*.

quired confidence, lest "timid capital" be frightened away. Smith's sound management of the L. & N. inspired the confidence of investors. He was not a wealthy man and showed little interest in accumulating wealth for himself. The satisfaction he sought was apparently from accomplishment in the work to which his life was devoted, the building of the L. & N. He hated Wall Street and its speculators and manipulators. Smith served the stockholders' interests but did so in his own way and apparently regarded the stockholders as a means to an end. He was firm and persistent in his efforts to maintain rates and to resist the encroachments of shippers, competitive carriers, the Interstate Commerce Commission, and the state legislatures and commissions. The activities of these groups at times not only threatened the road's revenue directly, but also tended to discourage capital investment in other southern industries and thus decrease the traffic of the Louisville & Nashville.

Smith opposed bitterly the granting of rebates and discriminations between shippers similarly situated, because such concessions came out of railroad revenues, but he resorted to other discriminations on a vast scale to obtain the largest possible revenue. He not only discriminated between places but made different rates to different classes of receivers of freight, distinguishing, for example, between commercial and industrial users of coal.<sup>3</sup> In another case he discriminated between rates on freight received from railroad connections on the one hand and steamboat connections on the other.<sup>4</sup>

The management of the L. & N. provides a standard by which other southern railroad systems may be judged. The contrast is striking, for the other chief systems serving Alabama were the victims of financial adventurers. The worst offender was the Richmond Terminal Company, which was manipulated by a succession of freebooters whose operations reached into the Queen and Crescent; the East Tennessee, Virginia, and Georgia; the Richmond and Danville; and the Central of Georgia systems. Out of the wreckage of several of these gutted systems J. P. Morgan and Samuel Spencer organized the Southern Railway system in 1894, which was honestly managed but was burdened with many of the financial obligations left by its predecessors. Smith was glad to see the Southern Railway organized, for although a powerful competitor, it was run by a

<sup>3</sup> *Ibid.*; also *Re Louisville & Nashville R. Co.*, 3 I.C.R. 609; 4 I.C.R. 157 (1891).

<sup>4</sup> *Bigbee & Warrior Rivers Packet Co. v. Mobile & Ohio R. Co.*, 60 Fed. Rep. 545 (1893).

responsible management interested in the maintenance of rates and the earning of profits for its stockholders.<sup>5</sup>

While the general movement of railroad rates after 1880 was downward, local rates not subject to competitive pressures showed little tendency to decline. The public tended to regard the competitive rates as reasonable and the noncompetitive rates as unreasonable. In numerous cases, state railroad commissions sought to reduce the level of local rates over a whole state; sometimes, as in Georgia in 1880, such attempts were successful. These state efforts to reduce local rates became a major concern of Smith. He developed a great organization that functioned as a political fire department, rushing in to put out the blaze wherever a legislature, a railroad commission, or a political agitator might threaten legal action to compel the reduction of rates. Perhaps the thing Smith feared most was the enforcement of the long-and-short-haul clause of the Interstate Commerce Act, prohibiting the charging of more for a short than for a long haul. He stalled successfully until the Interstate Commerce Commission in 1914 recognized that the southern carriers could not stand the loss of revenue which strict enforcement of the clause would entail.<sup>6</sup> He was dilatory in obeying Commission orders for the installation of safety appliances, for he did not want to throw away existing equipment until it had been thoroughly worn out.<sup>7</sup> Smith probably gave the Interstate Commerce Commission more resistance than any other railroad manager.

In the states served by it the L. & N. cultivated friends among influential people, some of whom had the power to control the appointment of legislative committees and throttle undesired legislation. The company found that logical and informed argument was perhaps the most effective defense, but control of the legislative machinery and skill in delaying tactics enabled the railroad interests to forestall unfriendly action on many occasions until surges of antirailroad sentiment had spent their force. The L. & N. issued free passes quite liberally to legislators and other public officials and persons of influence.<sup>8</sup>

<sup>5</sup> *Hearings before the Interstate Commerce Commission Relative to . . . the Louisville & Nashville Railroad Co.*, Senate Document 461, 64th Congress, 1st Session.

<sup>6</sup> *Fourth Section Violations in the Southeast*, 30 I.C.C. 153 (1914).

<sup>7</sup> Testimony of Smith before the Interstate Commerce Commission, 9 Dec. 1897, in *Railway Rates and Charges*, Senate Document 259, 55th Congress, 2nd Session, p. 7.

<sup>8</sup> See testimony of Smith, *ibid.*, pp. 3-5. In 1916 an investigation of the L. & N. by the Interstate Commerce Commission revealed that the free-pass situation in Kentucky and Tennessee was thoroughly rotten but found little

Smith considered that he was protecting the people against their own folly. Admitting, in 1907, that the state of Alabama had been generous to railroad corporations, he declared frankly that maintenance of this policy was due to the influence of the L. & N. "The citizens of Alabama," he said, "have, therefore, received in addition to the large investments made the benefit of the influence which the management has, with the cooperation of other railways and industrial interests, exerted in preventing the enactment and enforcement of suicidal laws."<sup>9</sup>

Smith felt that rates of noncompetitive points were a matter to be settled between the railroad and the shipper. But was the shipper obliged to pay whatever the railroad charged? If he thought the rate too high, he could walk, said Smith, who added that since local haulage rates were only fractions of those existing before railroads were built, there were *no* unreasonable rates.<sup>10</sup> Smith's attitude toward public regulation of railroads is perhaps best shown in a few excerpts from his sworn testimony before the Interstate Commerce Commission in 1916:<sup>11</sup>

I think, in the end, unless there is some change in public opinion, the ownership of the roads will be rendered valueless to their present owners, and the property will be practically confiscated. It is tending that way.

• • •

There is, and always has been, I suppose, since any capital was created, antagonism between the people and the capitalists, and if the commission [Interstate Commerce Commission] in their management, should, in the opinion of the majority of the people, favor the railways, this majority . . . will abolish the Interstate Commerce Commission. If necessary, in time, they will do the same thing with the Supreme Court, by changing the Constitution. It is the result of a majority rule, or democracy.

Mr. Folk. You think that if the Supreme Court should favor the railways that the people would abolish the Supreme Court?

Mr. Smith. Certainly. As soon as they see the courts favoring the railways they are wiped out, like the Commerce Court.

• • •

evidence of free passes used for political purposes in Alabama, where a strong law of 1907 stood in the way. *Hearings before the Interstate Commerce Commission Relative to . . . the Louisville & Nashville Railroad Co.*, Senate Document 461, 64th Congress, 1st Session, *passim*.

<sup>9</sup> Smith to Governor Comer, 23 Oct. 1907, in *Birmingham Age-Herald*, 24 Oct. 1907.

<sup>10</sup> Testimony of Smith before the Interstate Commerce Commission, 6 Dec. 1897, in *Railway Rates and Charges*, Senate Document 259, 55th Congress, 2nd Session, pp. 16-20.

<sup>11</sup> *Hearings before the Interstate Commerce Commission Relative to . . . the Louisville & Nashville Railroad Co.*, Senate Document No. 461, 64th Congress, 1st Session (1916), pp. 346-7, 405-10.

. . . it is an exceedingly difficult matter to protect the property of a large corporation in 13 different States from confiscation by the people.

• • •

People having a democratic government, with a majority rule, create commissions and other forms of government with power to confiscate — to, in one sense, destroy the value of the property to the owner.

• • •

All legislative bodies are a menace. In action they are a calamity, and we have them, commencing with the Congress of the United States, the State legislatures, the city or municipal legislative bodies, school districts, county organizations, and so on.

In our efforts to protect the property of the company we must do what we can to conciliate and placate and prevent, if we can in any reasonable way, injurious, destructive, or confiscatory legislation, the enforcement of laws enacted by various legislative bodies, and they are continually making more laws. This applies not only to the property of railways, but it applies to all large accretions of capital.

• • •

Mr. Folk. So, as I understand you, Mr. Smith, you consider government by the people as dangerous, and you conceive it to be your patriotic duty to counteract it?

Mr. Smith. No. What are we going to substitute? We do not want chaos. We do not want anarchy. We have got to have some form of government. We have a democratic form of government and it will stay with us. We have the power of the majority and they may in time, and I think they will, acquire such properties as railroads. The people have gotten a taste of blood.

• • •

. . . the only inducement for railroad companies to enter politics — become parties to the dirty work — is to protect their property from injurious, destructive, and confiscatory legislation.

Smith's opinions hardly constituted a constructive philosophy of government. The intense bitterness of his opposition to state regulation was a result of his own experiences. The crudity and arbitrary character of early state rate regulation and the proven impossibility of stopping complaints against "high" rates by granting concessions had led him to oppose any and all public demands, the granting of which he was sure would do financial damage to the company. The rate structure under which the company operated was an intricate house of cards based upon discriminations, and a threat to one point was a threat to the entire structure. Smith, of course, favored government as a protector of life and property rights, but it appeared to him a dangerous thing when it interfered with what he thought good for his company.

The protection of property rights and vested interests from the action of majorities was, indeed, a very serious problem. On the other hand, what was to protect the public from the exactions of predatory capitalists and greedy corporations? Opposing Smith's views were many leading citizens, including prominent figures in national politics. On the state level the particular nemesis of Smith was Braxton Bragg Comer, whose career illuminates a little-understood southern phase of the liberal or "progressive" movement in the politics of the early twentieth century.

Comer was born in eastern Alabama in 1848, the son of a self-made planter, who preserved some of his resources through the Civil War. The son engaged in cotton planting on a large scale after the war and somehow prospered above his fellow men in that discouraging business. In 1885 he entered the jobbing (wholesale grocery) business at Anniston and soon discovered that his trade territory was chopped off at the Georgia line, beyond which the local freight rates were much lower than those in Alabama. He soon learned the reason: exercise of mandatory power over rates by the Georgia railroad commission, which in 1880 had established and enforced low scales of rates for local traffic. Comer was deeply impressed, and through the years he observed that Georgia was more prosperous than Alabama, the reason being, he thought, lower local freight rates. In 1890 Comer moved to Birmingham, then a place of rapid growth and development, and entered into various business enterprises, notably grain milling, an activity in which freight rates and arrangements were important. During the latter half of the 1890's he was the busy promoter and manager of a large and modern cotton mill in Birmingham. Comer was an aggressive and able businessman and so prospered that by 1900 he was a wealthy man.

But Comer did not forget the Georgia freight rates. Through the 1890's he repeatedly tried to get the state legislature to create a strong railroad commission patterned after that of Georgia, with mandatory power to fix rates. In pursuing these efforts, he became intimately acquainted with the quiet but powerful legislative machine of the Louisville and Nashville, which opposed him.

After eleven years of defeat Comer had his first success in 1901, when the state's constitutional convention put into the new constitution the provision relating to the regulation of railroads that Georgia had adopted in 1877. In 1903 the Alabama legislature gave the railroad commission mandatory power and made it elective. In 1904 Comer was elected president of the commission, over bitter L. & N. opposition, and in 1906 he was elected governor of the state, all on



a platform of regulating the railroads and reducing their rates.<sup>12</sup> As governor he precipitated a bitter struggle with the railroads over freight-rate reduction, meeting in head-on conflict with Smith. Comer was no irresponsible reformer, trying to change something he did not understand. He was an able man of affairs, dealing with problems as well understood by him as they were by Smith. He knew the railroad rate structure thoroughly. One of his opponents, a railroad lawyer, later said of Comer, "He was the only man I ever saw in public life who could talk rates like a traffic man."<sup>13</sup>

The multiplication of trade centers, the coming of industry, the growing complexity of traffic, and the political attempts at railroad regulation were producing a rate pattern that made no theoretical sense and which became more and more unworkable.<sup>14</sup> Yet the development of local trade centers well integrated with their hinterlands called for rate structures favorable to local trade, not hedged about with restrictions and discriminations to control the traffic for the benefit of a particular railroad. It is not surprising that one of the first places to register discontent with the old system was the rapidly developing Birmingham, where businessmen worshiped Progress and looked to developments which had not yet taken place except in their minds. Birmingham was not on a waterway, but the completion of a rail line from Memphis to Birmingham in 1887 gave the latter access to a water-rail competitive route from the Midwest.

The small group who actively supported the Comer movement in its early stages were Birmingham businessmen who resented arbitrary railroad charges and discriminations, although Birmingham had a favorable position in the rate structure. The principal organizer, besides Comer, was not a shipper at all but a Birmingham criminal lawyer. Direct complaints as to competitive rates appear to have been only a minor factor in the motivation of the Birmingham group; yet it was here that the Comer movement first took root, in the late 1890's; only later and through proselyting was it extended to farmers.<sup>15</sup>

<sup>12</sup> For a review of these events in some detail see James F. Doster, "The Influence upon Alabama of Georgia's Regulation of Railroads," *Georgia Historical Quarterly*, XXXVII (March, 1953), 39-51, and "Alabama's Political Revolution of 1904," *Alabama Review*, VII (1954), 85-98.

<sup>13</sup> The quotation is from the words of R. E. Steiner of Montgomery in an interview with the author on 9 Dec. 1941.

<sup>14</sup> By 1916 even Milton H. Smith admitted that the system had in a considerable measure broken down. *Hearings before the Interstate Commerce Commission Relative to . . . the Louisville & Nashville Railroad Co.*, Senate Document No. 461, 64th Congress, 1st Session (1916), pp. 348-50.

<sup>15</sup> See Doster in *Alabama Review*, VII (1954), 85-98.

The specific goals that Comer sought were: (1) an elective state railroad commission with power to make rates and enforce its decisions, (2) lower rates on grain shipped into the state via the Tennessee River, and (3) the Georgia scale of local freight rates for Alabama, a scale in which rates were especially low on articles of common use and necessity. He was insistent that the railroads should not control the legislature and the railroad commission.

Comer himself had a large annual freight bill in his grain and cotton businesses. Besides his difficulties at Anniston, already noted, he had seen the southern flour-milling business destroyed by rates and milling-in-transit privileges given St. Louis and other northern milling centers by the railroads. Comer had to give up flour milling in Birmingham because of this disadvantage. He was particularly bitter that rates were so arranged that he could not obtain competitive advantage on grain shipments from the West via the Tennessee River. He continued, however, as a substantial wholesaler of flour, and his large grain mill is still an active enterprise in Birmingham. The fact is worth noting that many others in this line of business did not share Comer's views toward railroad rates.

Comer's cotton mill also had to contend with a confusing maze of rates on its raw material, but the company, the Avondale Mills, thrived nevertheless, and expanded to become a leader in the industry, which it is today. While Comer was active enough in seeking advantageous freight rates for his own enterprises, as leaders of competitive business were wont to do, in his great contest with Smith he was no mere self-seeker but a man of dedicated purpose, serving what he thought to be the public interest. Either Comer or Smith might have been glad to buy the other off with concessions had not important principles been at issue.

Comer had seen the devastation of the Civil War and "reconstruction." He had seen his state reduced to penury and its credit abused by railroad corporations. He had seen the farmer reduced to peonage, while financial manipulators looted the railroads and left the wreckage saddled with watered securities, on which the railroads claimed the right to earn 8 per cent unhampered. He had seen railroad reorganizations in which the old overcapitalization was permitted to continue, with the claim that future earnings might give value to otherwise worthless securities, an especially noteworthy case being that of the Central of Georgia, of which his brother had been for some years president and receiver. He still saw railroads gouging the farmers of the state to pay interest and dividends on watered securities. He saw railroad capitalizations based upon earning

power, which to him meant upon ability to extort taxes from the people in the form of railroad charges.

Comer agreed with Smith on the desirability of promoting industrial development, and he approved of Smith's enterprise in the development of the coal and iron business in the Birmingham district. He noted "that Mr. Milton Smith is regarded as a great friend to the Birmingham district, and that if anybody would write him that I want to open up a mine to dig coal or to mine ore, he would come there in his private car and look at it." But, added Comer, "the farmer has been overlooked."<sup>16</sup> Comer's thinking remained close to farming; in fact, he retained extensive plantation property in eastern Alabama and was still a large-scale cotton grower. Farmers found it hard to maintain the most meager standard of living. Many did not see any cash from one year's end to the next. To make possible escape from crop-lien peonage a very small amount of money each year might be a decisive influence.

Railroad traffic men believed that the volume of the agricultural traffic and trade was fixed by factors not related to railroad rates, and they were sure that its volume could not be substantially increased by rate reductions. In the *short-range* view they were undoubtedly correct, but Comer introduced an opposing contention which in the *long-range* view may have been valid. He stated the case as follows:<sup>17</sup>

The freight and passenger collections in Alabama amount to about 23½ million dollars a year. The freight collected is 17½ millions. Estimating that the local freight is \$7,000,000 and the overcharge 40 per cent., we have \$2,800,000 a year unlawfully collected. Multiply this by twenty years and we have \$56,000,000. Add interest at 6 per cent. and it is over \$70,000,000, a sum sufficient to pay the State's bonded indebtedness six times over; to build a million dollar cotton factory in every county in the State; to buy all the railroads in the State; to run all the public schools; a sum which, if left with the people of the State, would cause more thrift, the upbuilding of farms, of industries, of towns; would cause more travel and produce more tonnage; would be a generator of enlivening and prosperous conditions, that every species of interest would share.

To sustain his claim Comer quoted comparative freight rates in the states of Illinois, Georgia, North Carolina, and Iowa, the comparison showing, he said, discriminations against Alabama in local

<sup>16</sup> *Proceedings before the Alabama Railroad Commission at Montgomery, Ala., on April 3-6 and May 3-6, 15, 1905, in the matter of Fertilizer Rates and on the General Revision of Freight Rates in Alabama*, p. 96.

<sup>17</sup> *For Lower Freight Rates. Mr. B. B. Comer Files his Argument with the Railroad Commission*, 2 July 1903. Broadside.

rates of from 20 to 120 per cent. He quoted Frank H. Dixon on Iowa's benefits from lower local rates:<sup>18</sup>

The great benefit to Iowa has been found in the development of home industry. New coal mines have been opened, new mills and manufacturing concerns erected, the jobbing business has been extensively increased. Products are now exchanged much more largely between sections of the State than before, and the people no longer look outside the State to find both a purchasing and a selling market.

• • •

The farmer gets his supplies cheaper and heavy commodities at a fair rate. Finds a market for a portion of his surplus at home and saves transportation. The railway policy of the long haul has been supplanted by the new system, and an exchange of products between different parts of the State is one of the commendable results, and the roads' net earnings per mile has [*sic*] increased.

Comer wanted the state to develop an integrated local economy. If the farmer prospered, there would be a growing market for local manufactures. With reasonable freight rates, free of the heavy discriminations against local shipments, the way would then be open for local enterprises to thrive and to accumulate capital, taking advantage of nearness to raw materials and markets. Comer wanted to develop his state from the strength of its own people and for their benefit, obtaining help from the outside but resisting outside control. Milton H. Smith wanted to develop Alabama through the intervention of an outside commercial agency. From the viewpoints of both Comer and Smith scarcity of capital and the difficulty of securing credit represented a formidable barrier. Both wanted outside capital, but they had different plans for getting it.

From the investor's point of view southern undertakings were risky, and a high rate of return was consequently to be demanded. Credit facilities were poor, and there was not much to offer as security. The existence of a modicum of local capital would give stability to values and improve the soundness of security and perhaps also provide more equity capital in new enterprises to make them financially safer. Comer's idea was that a well-ordered state would attract capital without giving away ruinous concessions to capitalists. If the state prospered, its railroads would prosper, thought Comer; if railroads prospered, the state would prosper, thought Smith. Actually L. & N. profits were largely being reinvested in the

<sup>18</sup> *Ibid.*, quoting, somewhat inaccurately, Frank H. Dixon, *State Railroad Control with a History of its Development in Iowa* (New York, 1896), 195-6. The second paragraph is Comer's paraphrase of a quotation by Dixon from the 1891 *Annual Report* of the Iowa railroad commission.

company's business, thus benefiting the state, but the ownership and control were vested in absentee owners, whose interest in their distant properties was largely limited to security, interest, and dividends and to whom a considerable share of future profits would necessarily flow.

In the background of the conflict between Comer and Smith were the great cleavages between the people of an agrarian state with a colonial economy and the absentee owners of capital; between popular majorities and vested interests; between agriculture and industry. Facing the people of Alabama was the question of how best to grow out of a colonial economy, within the framework of the law and economy of the United States. If the state's policy were too arbitrary with investors of capital, investment might be discouraged, but it was certainly not to the state's interest to turn corporations loose to exploit the state in their own interest as they might choose.

It appears to the author that what Comer sought was much to be desired, but that for the time being it was necessary to depend largely on the kind of development being undertaken by Smith. The state could not be a master of its own affairs as long as this was the case. The dose was bitter, but the accumulation of local capital and the building of local leadership in industry was necessarily gradual. Comer presumably knew this, but he was eager to speed the process and remove the attendant abuses.

Smith bitterly accused Comer of frightening away capital investment from Alabama, but the author is in doubt whether it was Comer or Smith who was more influential in this direction; Smith's extravagant allegations concerning the dangers of political interference certainly must have discouraged "timid capitalists."

Comer and Smith were die-hard extremists in this conflict between a state and the absentee owners of capital. Actually, other leaders on both sides were disposed to work out compromises after the extremists had butted their heads together. The Southern Railway and numerous others capitulated to Governor Comer in 1907 for the sake of peace.<sup>19</sup> The L. & N. sought shelter in the federal courts,

<sup>19</sup> The Southern Railway faced simultaneous pressure in Alabama, North Carolina, and elsewhere. "While the sacrifice of its revenue is a matter of no small moment," said the company's representatives, "and a surrender of its legal rights a matter of serious concern, yet it is willing to make such sacrifice and surrender rather than enter into or prolong what might become an angry contest with the authorities of the State of Alabama." J. S. B. Thompson and Alex P. Humphrey to Governor Comer, 8 Aug. 1907, in Governor's letterfile No. 138, Alabama State Department of Archives and History, Montgomery; *Montgomery Advertiser*, 9 Aug. 1907. R. E. Steiner told the author in an interview on 9 Dec. 1941, that the man responsible for the Southern's policy was

which from 1898 to 1913 gave railroads extravagant protection from the states, but in the latter year in the *Minnesota Rate Cases*<sup>20</sup> the United States Supreme Court jettisoned the protection and left the railroads largely at the mercy of the states. In Alabama, however, the people, who had been greatly stirred by Comer and had passed through a period of extremism, were tired of strife and in 1914 accepted a compromise. The issue had become befogged by rising price levels, which were reducing railroad earnings, and by the increasingly potent intervention of the Interstate Commerce Commission in railroad affairs.

The developing national dilemma in which Comer and Smith stood at the two opposing horns was in how to regulate the corporations so as to make them serve the public interest without crippling their capacity to do so and without deterring the initiative of their officers and the faith of their owners and creditors. In dealing with railroads Alabama received its first taste of the problems of an industrial society. Clashes and conflicts were due more to misunderstanding than anything else, for the people needed good transportation service and strong, well-managed railroads. The railroad corporations, on the other hand, needed public good will for successful development and profitable operations. The railroads had had a bad experience with early railroad legislation, which had been clumsy and lacking in understanding of railroad problems. The people, on the other hand, rightly objected to domination by railroad power, but how could they check this power and not at the same time destroy much-needed railroad enterprise? What was called for was a formula for reconciling the private and public interest.

---

J. P. Morgan. Steiner had been present at a meeting of railroad men at Morgan's New York office when the decision was in the process of being made.

<sup>20</sup> 230 U.S. 352.



*By Thomas C. Cochran*

PROFESSOR OF HISTORY AT THE  
UNIVERSITY OF PENNSYLVANIA

*Ray Ginger*

FORMER ASSISTANT PROFESSOR OF  
BUSINESS HISTORY AT HARVARD  
UNIVERSITY

## The American-Hawaiian Steamship Company, 1899-1919<sup>1</sup>

*At a time when American shipping generally was finding it difficult to compete in international trade, certain American shipping groups were profiting largely. The strength of the American-Hawaiian Steamship Company derived from conservative financial policy, bold but not reckless expansion, astute analysis of trading opportunities, skillful handling of competition, and decisive adaptation to emergencies. A closely knit group of owner-managers held the reins of control. Internal strength permitted optimum realizations from a favorable commercial environment and even helped to make that environment favorable.*

The formation of the American-Hawaiian Steamship Company in 1899 seemed to promise a revival of the moribund American merchant marine. For two decades after its foundation the company amply realized this promise: it pioneered in the American building of modern large steam freighters, in the introduction of oil-fired boilers, in the opening of the combination steamer-railroad route across the Isthmus of Tehuantepec in southern Mexico. It earned good profits and expanded out of earnings. American-Hawaiian never hauled a paying passenger, but its vessels in the trade between the Atlantic and Pacific coasts and the Territory of Hawaii constituted the largest single fleet of freighters under the American flag. When the United States entered World War I in the spring of 1917, about 25 per cent of the deadweight tonnage of large sea-going freighters under U.S. registry was owned by American-Hawaiian.

<sup>1</sup> During the period discussed in this article, American-Hawaiian was a very closely held corporation which did not even publish annual reports. Therefore, unless otherwise noted, this article is based on the unpublished records of the American-Hawaiian Steamship Company, which are still in the firm's files. Mr. Edward P. Farley, chairman of the board of American-Hawaiian, has kindly consented to the publication of this material.

This steamship company grew out of the agencies and partnerships which had long dominated the square-rig sailing traffic around Cape Horn, especially the New York firm of Flint and Company, and the San Francisco firm of Williams, Dimond and Company. The New York agency of the former firm was in the hands of the Maine-born David B. Dearborn; the New York agency of the latter firm was held by David's son, George S. Dearborn. This familial tie is but one of several links between the two partnerships which ultimately led to the formation of American-Hawaiian.

George S. Dearborn first had the idea of converting these intercoastal fleets from sail to steam in 1882, when he was only 24 years old. His plan was frustrated by the depression that soon engulfed the shipping industry and lasted throughout the decade. In the spring of 1891, by which time Dearborn and his cousin Henry E. D. Jackson had become partners in the New York shipping agency of Dearborn and Company, the upswing of business seemed to warrant reviving the project. Dearborn turned for support to his brother-in-law Lewis Henry Lapham, head of H. G. Lapham and Company, one of the largest leather companies in the country.

Dearborn felt that his firm had enough business to enable a fleet of steel steamers in the intercoastal trade to earn 25 per cent annually on invested capital. He proposed to order a large steamer from the Pennsylvania Steel Company at a price of \$270,000 ("which is about as low as can be done on the other side," he added), with an option to buy others at the same price. Having signed this contract, he would then approach Drexel, Morgan & Co. to market \$2,500,000 of 5 per cent, 20-year bonds. These bonds would provide the entire capital of the company. An equal amount of stock would be issued, of which part would be paid to the underwriters for their services and the remainder would be apportioned among the founders. Allowing 5 per cent on the bonds and 5 per cent for a sinking fund, the company, Dearborn estimated, should still earn enough to enable the common stock to pay 10 to 15 per cent. Lapham regarded this sort of finance as unsound, and he was unconvinced by Dearborn's estimates of earnings. He spurned the project. His caution was wise, as the shipping industry soon fell into another slump.

But in 1899 the time was ripe. The war with Spain had given the United States a far-flung empire in the Pacific. Even more important was the acquisition of Hawaii: in 1899 trade and shipping between the Islands and the continental United States were given protection from foreign competition, and the next year Hawaii was formally organized as a Territory. Dearborn was quick to perceive that

Hawaiian sugar was the solution to one of the persistent problems of the intercoastal trade: the shortage of eastbound cargoes. Besides these factors of special benefit to the shipping business, more general considerations tended to favor a new venture. The United States had idle capital looking for profitable outlets rather than the usual situation of an excess of entrepreneurs with sound propositions seeking capital. The government was generally regarded as sympathetic to the goals and problems of business.

The company projected by Dearborn would use steamships. He had been thinking in these terms for almost two decades, and the events of the Spanish-American War had confirmed his view. The new United States Navy, which triumphed at Manila Bay and at Santiago, had abandoned its auxiliary sails. The battleship *Oregon* had steamed from the Pacific through the Straits of Magellan to join the American fleet at Santiago with daily newspaper bulletins proclaiming its progress, and everybody knew that it had not made a single stop en route. Thus persuaded by Dearborn's vision, Flint and Company liquidated its entire investment in sailing ships, preparatory to pouring the funds into new steel steamships.

Dearborn quickly lined up other support. Lewis Henry Lapham now agreed to the project. In San Francisco, Williams, Dimond and Company responded enthusiastically. Dearborn hurried to Honolulu for conversations with the Sugar Factors, who controlled the marketing of the Hawaiian crop. As agent for the California Clipper Line, Dearborn had already built up close associations with the Factors, and they readily came into his plan, agreeing to subscribe for a large block of stock in the new company and also to sign a contract guaranteeing full eastbound cargoes to their refineries in Philadelphia and New York for a term of years. The last hurdle surmounted, Dearborn returned home.

The American-Hawaiian Steamship Company was incorporated in New Jersey on 7 March 1899,<sup>2</sup> with seven directors: Dearborn and his partner Henry Jackson; Wallace Flint and W. D. Burnham of Flint and Company; Andronicus Chesebrough and Oscar Sewall of Williams, Dimond and Company; and James H. Post of the National Sugar Refining Company. Dearborn was elected president, Flint first vice president and treasurer, Chesebrough second vice president, Jackson secretary, and Burnham manager. The new corporation obviously had inherited as officers men with years of sound experience in the sailing trade, and most of its initial capital of \$750,000

<sup>2</sup> The original name was American-Hawaiian Steam Navigation Company, but it was quickly changed.

came from the same source. Four stockholders held a majority of the stock: Flint and Company, H. G. Lapham and Company, Williams, Dimond and Company, and George S. Dearborn. The remaining shares were all held by firms and individuals intimately associated with the officers.

American-Hawaiian immediately ordered four new steel steamships, one from the Union Iron Works in San Francisco for \$400,000, three others from the Roach Shipyard at Chester, Pennsylvania, for \$425,000 each. Every vessel was to be about 5,600 registered tons and to have a total deadweight capacity of 9,000. During the year while they were awaiting the delivery of these ships, the officers labored to establish agencies, choose personnel, negotiate sugar contracts, and arrange for coaling berths and pier facilities. Fortunately, as with executives and capital, so with organization, they inherited most of their needs from the antecedent sailing firms. A new partnership of Flint, Dearborn and Company, with Henry Jackson as manager, was formed to serve as general agents in New York and to handle the traffic department of the company, paying all charges and attending to all claims, documentation, and other freighting business. In payment, the agency received 7% per cent of the net freight list on all outbound cargo and 5 per cent on inward cargo.<sup>3</sup>

In the American-Hawaiian home office there was a smooth-functioning division of responsibility. Dearborn formulated the general strategy of the company, planned for its long-term growth, and coordinated the work of the various departments. Henry Jackson supervised relations with the shippers, especially those of general cargo, and with the other East Coast agencies. Lapham was the chief authority on finance. His conservative influence in this regard was felt at the very beginning of the company, when Dearborn favored the issue of preferred stock to raise the paid-in capital, with the common being distributed on a bonus or low-cost basis. Lapham demurred, and the entire initial capital was raised by 7,500 shares of common, par \$100, fully paid for in cash at the demand of the

<sup>3</sup> Williams, Dimond and Company were named general agents for the West Coast. The various activities of this firm in San Francisco — the members were private bankers, commission merchants, manufacturers' representatives, insurance agents, purchasing agents, representatives of the Hawaiian Sugar Factors — went far to guarantee the success of American-Hawaiian in their area. In return for its services, the partnership was to receive 5 per cent of the net freight list on outward cargoes, and 2% per cent on inbound freight. Agencies in Hawaii were given to two of the largest sugar factor partnerships in the islands: Hackfeld and Company at Honolulu, and Davies and Company at Hilo. Besides the general agencies, local agents were appointed in Philadelphia, Boston, Los Angeles and San Diego; and the firm of Carey W. Cook was named agent for the ports of Washington and Oregon.

president. Lapham's role in the company was further increased in 1901, when the Flints suffered misfortune in some personal speculations on the New York Stock Exchange and were forced to sell their American-Hawaiian stock. Lapham bought this stock, making him the largest single owner, and he succeeded to Wallace Flint's office as first vice president.

Operations were under the charge of the manager of American-Hawaiian, William Dickson Burnham, a hard-fisted and driving taskmaster who had served as captain on sailing vessels for 14 years before becoming port captain (that is, marine superintendent) of Flint and Company in 1893. Burnham brought to American-Hawaiian an emphasis on low costs of operation, strict adherence to schedules, and high maintenance expenditures in order to preserve the value of equipment.<sup>4</sup> He also brought the captains for the new steamships: the masters of three of the original four American-Hawaiian ships had been captains in the intercoastal trade for Flint and Company, and the sole exception was replaced by another Flint captain after a single voyage. The only major position in American-Hawaiian which was not filled from the ranks of Flint and Company was that of chief engineer. For this office Burnham chose a long-time acquaintance, Valdemar Frederick Lassoe, who had emigrated to the United States from Denmark in 1860 and become associated at once with the famous John Ericsson, who was then designing the *Monitor*. After 25 years as Ericsson's assistant, Lassoe had served as consulting engineer for Hamburg-American and other major lines.

In the spring of 1900, with the four original ships nearly completed, American-Hawaiian issued \$900,000 of 6 per cent bonds, secured by the new freighters. The directors believed that loan capital should be raised only in the beginning of a business and should be repaid from earnings as rapidly as possible. Therefore they provided that the bonds should be retired annually from 1902 to 1914 by drawing lots for the numbers, with the bonds thus drawn to be paid at a 5 per cent premium plus interest. They further provided that any bond could be called on any interest day at a 10 per cent premium. The entire issue was bought by the American-Hawaiian stockholders or by companies in which they were interested. It was followed in April by another 7,500 shares of common

<sup>4</sup> While at Flint and Company, Burnham had clearly shown the advantages of this last policy. Wooden sailing vessels were usually expected to be unseaworthy after 10 to 14 years, but Burnham kept ships in effective operation for 20 years or more. When Flint and Company sold its sailing ships in 1898-99, it received \$25 a ton for ships with an average age of 19 years, and this at a time when new steamships could be built for \$60 a ton.

stock, par \$100, which were sold to the same circle. The company then contracted for the construction of two more ships, one of which, the *Alaskan*, with a deadweight capacity of 15,062 tons, was the largest freighter built in any United States shipyard up to that time.

Burnham and Oscar Sewall, another director, went to Hawaii in the summer of 1900 to negotiate with the Sugar Factors. The contracts signed with representatives of eight firms provided for monthly cargoes beginning 15 January 1901, which would aggregate 50,000 tons during the following seven months. The freight rate was fixed at \$8.50 per ton for New York delivery and at \$8.875 for Philadelphia delivery.<sup>5</sup> Burnham and Sewall were so impressed by the possibilities of the Hawaii trade that they recommended further expansion of the fleet. Accordingly the directors, in Christmas week 1900, voted an issue of \$1,400,000 in bonds on terms similar to the previous issue, except that in this case the final date for annual drawings and retirement was set at 1 February 1916. The new issue also was absorbed by the same few investors. American-Hawaiian, with a capital of \$3,800,000, had become financially important in the shipping world before it had completed a single round voyage.

The first four freighters<sup>6</sup> went into operation in the autumn and winter of 1900, plying on schedule between the Atlantic ports, the West Coast, and Hawaii. Sailing ships had always sailed around Cape Horn, since tacking through the Straits of Magellan would be an endless task, but Burnham had resolved to use the shorter route. He was not dissuaded even when the marine underwriters, worried by the narrow and treacherous 300-mile channel through the Straits, demanded a rate of 6 per cent on the hull of any ship using that route, as against 3 per cent for other voyages of the same length. By 1903, on the basis of American-Hawaiian performance, Burnham had gotten the insurance rate down to 3½ per cent. And the route through the Straits had proved its worth in cutting trip time and improving relations with shippers. Whereas the average time for sailing ships was about 125 days, American-Hawaiian vessels from the beginning made the New York to San Francisco run in less than 70 days. In 1901, the *American* made the voyage in 59 days, break-

<sup>5</sup> This was the first of a series of sugar contracts extending until mid-1916.

<sup>6</sup> These original steamers also carried two large trysails, a fore staysail and jib, and a main staysail, which were constantly used in the early days. But even here Burnham was an innovator, being the first steamship man to set a ship's masts upright. Raking masts had been the rule in sailing ships, but on a steamship the main function of the mast was to serve as a support for cargo booms, and a raking mast was apt to cause trouble by throwing the lead of the forward booms badly out of line.



ing all previous records. Two years later, the normal time required was just over 50 days.

Many difficulties had to be overcome in these early years. At some Hawaiian ports-of-call the harbor facilities would not accommodate the large American-Hawaiian vessels, which were sometimes severely buffeted while standing in open water. Even more serious was the problem of refueling. The company's ships coaled at St. Lucia in the British West Indies and at Coronel in Chile. At the latter place, especially, the available coal was inferior; it burned too fast and sent dangerous sparks from the funnel. This circumstance emphasized the desirability of converting American-Hawaiian vessels from coal to some other fuel. Valdemar Lassoe, even before he joined the new firm as Marine Engineer, had been experimenting with Luther D. Lovekin of the New York Shipbuilding Company on the construction of a practical oil burner for steamships. Lewis Henry Lapham had long had extensive investments in oil lands in East Texas. Out of this cluster of conditions came the most important technological innovation in the early history of American-Hawaiian: the Lassoe-Lovekin oil burner.

Lassoe's eagerness to get a practical test for his invention won support from Lapham and Burnham, and in 1902 the oil burner was installed in two new 5,260 ton steamers, the *Nevadan* and the *Nebraskan*, which had been built for the ferry run from San Francisco to Hawaii. That summer the *Nevadan* made the 4,341 mile round trip from San Francisco to the Islands — the first ocean voyage by an oil-burning vessel under the American flag. The experiment was an immense success: the vessel traveled faster with oil than with coal, it obtained 20 per cent more power from the boilers, pressure could more easily be kept constant, and the services of nine men in the boiler room were rendered unnecessary.

It was now resolved to try the oil burner on the longer intercoastal run through the Straits of Magellan, where the potential gains were even greater. In February, 1904, the *Nebraskan* left San Diego for New York, and reached harbor 52 days later, having completed the longest steamship run with oil as a fuel up to that date. Referring to this voyage as the "sensation of the time," the *Marine Journal* of 9 April 1904 declared: "Taking into consideration the saving of time, cargo space, and fireroom force, it has been estimated that this vessel saved on the voyage about \$20,000 in the substitution of oil for fuel in place of coal." Lassoe pointed to another advantage of oil over coal: with the former fuel the doors of the boiler were not opened throughout the voyage, heat in the boiler remained constant,

and the boiler's longevity and efficiency were both enhanced. As a result of these tests, American-Hawaiian converted over the years to the exclusive use of oil in its steamships. Many other companies in the merchant marine followed suit. Moreover, the *Nebraskan's* voyage did more than anything else to convince the United States Navy of the superiority of oil as a marine fuel.<sup>7</sup>

The five vessels completed for American-Hawaiian in 1902-1903 also contained other changes. They were the first flush-decked ocean-going freighters under the American flag; Burnham had decided that a flush-decked ship would be drier and more seaworthy for the long runs through some of the roughest water in the world. Each ship had an additional between-decks in the top-sides, to be used for light general cargo on the westbound run. Another innovation turned out less happily. On the *Alaskan* and the *Arizonan*, the twin screws were inturning. It was believed that this might give more driving power, but in practice the inturning screws had unfortunate effects on the rudder, so that the ships were difficult to handle. This alteration was never used again.

Even the Lasso-Lovekin oil burner contributed a touch of irony. In 1902, at a session in the board room of American-Hawaiian, the Texas Company was formed to take over the oil properties and contracts of the Texas Fuel Company, in which Lewis Lapham was a heavy investor. The projected use of oil by American-Hawaiian was regarded as one of the major assets of Texaco. But in later years, although American-Hawaiian ships were converted to oil, and although American-Hawaiian became a large stockholder in Texaco, the two companies did little business with each other because of the high cost of shipping oil from Texas to California.

American-Hawaiian was quite profitable from the beginning. During the first 16 months of operations, from the late summer of 1900 until the end of 1901, with only four ships in service, the net profit was \$197,000 on an equity capital of \$1,500,000, and by 1906 earnings from operations reached the sum of \$473,415. By the end of 1906, the company had a net worth of \$4.5 million, practically all of which was invested in its fleet of nine new freighters, claimed to be the best vessels of their kind under any flag.

Since ownership of the firm was entirely in the hands of the officers and their friends, the net revenues could be used to promote the long-term position and profitability of the company. Depreciation funds were established on a 20-year basis, although nobody doubted

<sup>7</sup> The Naval Liquid Fuel Board, U.S. Navy, published a report on 1 Aug. 1904, analyzing the voyage of the *Nebraskan* from San Diego to New York.

that the ships would last much longer than that,<sup>8</sup> and special reserves were created to cover all likely contingencies. Dividends of \$3.00 per share were paid in 1902, of \$4.50 per share in 1903, and of \$6.00 per share in each of the following years. Most of the constantly growing earned surplus of the company was devoted to expanding and improving the fleet.<sup>9</sup>

In spite of this use of its earnings, the construction program of American-Hawaiian necessitated further increases in its capital stock. At the end of 1902 the company offered another 10,000 shares of common to its stockholders. The issue was taken up so quickly that an issue of 10,000 additional shares was authorized early in 1903, of which 3,750 were sold to the same small group of investors and the remainder were held in the treasury of the firm.

The high earnings of American-Hawaiian were due in large measure to the strong upward trend in the volume of freight moving from East Coast to West Coast, and from the United States to Hawaii. American-Hawaiian ships reaching New York found all the west-bound traffic that could be handled waiting for them at the pier. Each new two-year contract negotiated with the Hawaiian Sugar Factors called for an increased amount of eastbound cargo: seven cargoes of sugar totaling 62,000 tons between 15 January and 15 August 1902, seven cargoes totaling 70,000 in the same period of 1903, and 23 cargoes totaling 214,000 tons in the same period of 1904. The only serious traffic problem was a shortage of eastbound freight during the autumn months, but gradually the company built up off-season cargoes consisting of such West Coast products as canned goods, lumber, wool, flour, and especially canned salmon and preserved fruits.

A second factor in the success of American-Hawaiian was its unrelenting effort to reduce costs: by high maintenance expenditures, by vigorous measures aimed at reducing turn-around time in the ports, and by purchasing its supplies in bulk from a single supplier in each line of goods.<sup>10</sup> But the company did not try to cut costs at the expense of its crews, who were given better quarters and food than had ever been provided by any steamship line: refrigerated

<sup>8</sup> Many American-Hawaiian ships were still in operation 30 or 40 years after construction. It should be remembered that, prior to 1909, there were no Federal taxes on corporate income, and a company was entirely free to work out its own depreciation policy.

<sup>9</sup> As already noted, American-Hawaiian became a substantial stockholder in the Texas Company.

<sup>10</sup> Most of the credit for economical operation goes to Burnham, but in 1906 Victor Thun was appointed to the newly created post of auditor, and thereafter Thun established an excellent system of internal controls.

beef was carried for the entire voyage; canned goods, milk, eggs, and butter were provided; on holidays there were turkey dinners for all hands.

The American-Hawaiian officers were also careful to avoid cut-throat competition in the trade. In both the intercoastal business and the Hawaiian run, their company was protected by law from the low-cost rivalry of foreign vessels. But even in the sugar trade, American-Hawaiian had to share the traffic with other companies. For instance, in the two months of July and August, 1906, American-Hawaiian ships carried 20,642 tons of sugar to the East Coast of the United States through the Straits of Magellan; 10,101 tons went on sailing vessels around Cape Horn; 13,834 tons were refined in California; and 18,882 tons were shipped to the East by rail. For the intercoastal business, the chief potential competitors were the trans-continental railroads, and Henry Jackson labored to neutralize these financial giants. He gave them full information on American-Hawaiian rates, and he made no effort to capture business which lay distinctly in the railroad field. In return, the railroads did not seriously interfere with the growing cargoes of American-Hawaiian.

A greater menace appeared in 1903 in the person of Sir Weetman Pearson, head of the international construction house of S. Pearson and Son, Ltd., of London. In 1902 Pearson had signed a contract with the Mexican government, then dominated by Porfirio Diaz, for the construction of a modern railroad across the 150-mile wide Isthmus of Tehuantepec in southern Mexico. Also projected were harbors able to accommodate the largest steamships at Coatzacoalcos (afterwards called Puerto Mexico) on the Gulf of Mexico, and at Salina Cruz on the Pacific. The Mexican government was to finance the work to the extent of \$60,000,000.

The construction under way, Pearson called on the heads of the largest shipping firm in the intercoastal trade: American-Hawaiian. If Dearborn would agree to abandon the Straits of Magellan route and ship all cargoes across Tehuantepec by rail, Pearson estimated that the sailing time from New York to San Francisco would be reduced from the current 50 days to 30-35 days. If Dearborn refused this proposition, Pearson would build a rival steamship line under the United States flag and set out to capture the intercoastal trade.

The leaders of American-Hawaiian had differing responses to this ultimatum. Burnham, the operations man, was disturbed by the fact that an article shipped from coast to coast by the Tehuantepec route would be handled no less than six times en route, with unlimited

possibilities for damage to the cargoes. Certain that he could keep American-Hawaiian costs below those of any rival, Burnham wanted to fight. Moreover, the Panama Canal, on which construction was finally begun in 1904, would be open for traffic in a few years. But Dearborn and Lapham were unwilling to enter cut-throat competition with a rival who could draw on the financial resources of the Mexican government. They indicated to Pearson a desire to discuss his proposition.

After two years of negotiations, a contract between American-Hawaiian and the Tehuantepec National Railway was signed on 9 May 1905. Concurrently, the 6,250 shares of American-Hawaiian stock which had been reserved in its treasury from the issue of 1903 was sold to Pearson and the railroad at \$120 per share.<sup>11</sup> By the terms of the contract, revenue from cargoes crossing the Isthmus would go two-thirds to American-Hawaiian and one-third to the railway. But if in any year American-Hawaiian's earnings per deadweight ton of its fleet in commission fell below the average for 1904, the difference was to be made up by the railway, provided (a) that the railway's share in operating revenues did not fall below 25 per cent, and (b) that new vessels could not be added to the fleet without the railway's approval.<sup>12</sup> The contract was subject to cancellation by either party, on six months' notice, when the Panama Canal was opened.

The contract signed, American-Hawaiian began expanding its fleet in anticipation of a great increase in business. From 1905 to 1908, it acquired five new freighters, ranging in capacity from almost 14,000 deadweight tons to 8,430. Meanwhile construction on the Isthmus moved slowly — the harbors in particular took large amounts of dredging — and the Tehuantepec route was not opened for nearly two years. After the new service was instituted in early 1907, American-Hawaiian had separate fleets, one in the Atlantic, the other in the Pacific, with the Tehuantepec National Railway as the connecting link.

And, for a time, a frightful link it proved to be. The first voyage

<sup>11</sup> The par value of these shares was of course \$100. Since American-Hawaiian shares had never been sold publicly, they had no established market value. In 1905 the company paid a \$6.00 dividend, but its earnings were considerably more than that amount and its growth potential was very promising.

<sup>12</sup> Since 1904 had been a good year for American-Hawaiian, with earnings of nearly \$5.00 per deadweight ton, this clause proved quite advantageous. In every year that the contract was in force except 1912, American-Hawaiian earnings per deadweight ton were below the critical figure; in 1910 the amount paid to it by the railway was as high as \$360,000.

by the new route confirmed Burnham's worst fears. The railway was dependent on native Indian laborers who were wholly untrained for stevedoring. Although the loading machinery at the ports and the rolling stock of the railroad were as good as any in the world, the workers were unskilled at using them. At the harbors each ship was provided, besides her own gear, with an electrically driven gantry crane of ten-ton capacity at every hatch, but the workers had had no experience in manipulating the cranes and the machinery was constantly breaking down. The clerical staff of the railway had no method for checking cargo quickly. Since most of them did not know English, at first they insisted that all manifests be translated into Spanish; subsequently they simplified matters by abandoning all effort to keep records. Conditions at the ports became chaotic; the docks were cluttered with merchandise. The first ship arriving at Puerto Mexico spent 17 days in port; the first vessel at Salina Cruz took a full 30 days.

Although there was still some time saved in comparison with the Straits route, it was far less than the 20 days predicted by Pearson. Even more disturbing was the damage to cargo. American-Hawaiian, adhering to the standards of packing laid down by the Interstate Commerce Commission for the railroads, had customarily accepted cargo in fragile containers and handled it carefully. But goods packed in this way would not withstand the mishandling by inexperienced stevedores at Tehuantepec. During the first year of operations by the new route, only 80 per cent of the goods went through undamaged. Of the remaining 20 per cent, half was lost in transit or was too badly damaged to be sent forward to its destination. American-Hawaiian tried to pay all valid claims for damages, and it established repair shops at the two ports, importing carpenters and lumber at considerable expense.

Another problem was theft, both the petty sort that might be expected from impoverished workers who chanced upon broken cases of luxury goods, and organized looting. Gangs began to break into cars and warehouses at night and remove undamaged cases. Any train which stalled at a siding was in danger of attack, and finally efforts were made to wreck trains. One night six freight cars were derailed in a wild locality, broken open, and stones were substituted for the original contents of the cases, in which condition they were later delivered at Salina Cruz.

In 1909 and 1910, American-Hawaiian lost two of its largest customers, who complained that they had never had a good shipment across the Isthmus and who refused to believe that a good shipment



was possible by that route. As late as 1910, it was estimated that only about 85 per cent of the cargo went through undamaged. But that was the last really bad year. Gradually the workers learned to operate the complicated equipment and to keep track of goods; the Mexican government provided better police protection; Chinese laborers were imported to serve as stevedores. Eventually a vessel docking at Salina Cruz could be completely discharged and ready for reloading in only 48 hours.

Even during the worst difficulties, American-Hawaiian showed a steady increase in cargo carried, due largely to the saving in time and the additions to its fleet. Half a dozen European lines, including the Hamburg-American and the French Line, were persuaded to call at Puerto Mexico, and their cargoes were picked up by American-Hawaiian ships at Salina Cruz to be distributed to the Pacific Coast and the Islands. Whereas in 1906 American-Hawaiian had carried about 200,000 tons of cargo through the Straits, in 1907, the first year of operation over Tehuantepec, the tonnage carried was 315,985, and by 1913, the last full year of operation over this route, it reached 753,113.

The increased volume of business and the new route brought a sweeping revision of service and schedules. By 1909, six ships were assigned to the Atlantic fleet; with total time for a round-trip from New York to Puerto Mexico at 42 days, this meant that a ship sailed every seven days. In 1910 the time between sailings was reduced to six days. On the Pacific side there were two services. Five ships on a 14-day schedule (reduced to 12 days in 1910) sailed what became known as the Golden Triangle: from Salina Cruz up the coast to Puget Sound, thence to Hawaii, and back to Salina Cruz — 70 days for the total voyage. Two ships on a 21-day schedule sailed between Salina Cruz and Puget Sound. There were also ships running from San Francisco to Hawaii and back on a monthly schedule, and a chartered steam schooner carried freight between San Francisco and Portland. Additional ships were chartered during rush seasons.

After 1910, the chief traffic problem of American-Hawaiian was the unstable volume of eastbound freight. Often the company's advance estimates of its business were as much as 25 to 30 per cent wide of the mark. Shipments of sugar to the East Coast were restricted by the expansion of sugar refineries in California; in 1911, for example, American-Hawaiian carried 287,853 tons across Tehuantepec and only 24,354 tons went by sail around Cape Horn, but 153,000 tons were delivered to San Francisco. Fortunately, the traffic in pineapple from Hawaii increased rapidly, with American-

Hawaiian carrying only 12,000 cases in 1908 and fully 400,000 in 1912.

Meanwhile the Matson Line was vigorously competing for traffic between San Francisco, Puget Sound, and the Islands. Its smaller ships could enter ports in Hawaii and on the Columbia River which were closed to the American-Hawaiian freighters. Even more important, Matson had close relations with some of the Sugar Factors. But American-Hawaiian also had considerable bargaining power: no other company was equipped to handle the full volume of sugar shipped from the Islands, and American-Hawaiian had under construction the *Honolulan*, a vessel with passenger accommodations, which it could use to compete for passenger business to Hawaii in case of a trade war with Matson. But in the spring of 1910, the contestants decided for peace. American-Hawaiian and the Sugar Factors negotiated a new agreement to run until 30 September 1915. American-Hawaiian agreed to charter the *Honolulan* to Matson and not to go after the San Francisco-Hawaii traffic. Matson promised to charge the same rates as American-Hawaiian for freight from the Puget Sound area to the Islands.<sup>13</sup>

Dearborn was not always so conciliatory. In the autumn of 1909, a son of Andronicus Chesebrough, the original second vice president of American-Hawaiian, called at Dearborn's office to explain that he and another young man intended to start the Pacific Coast Line, which would operate a fleet of small ships down the coast to the Panama railway and from there by Atlantic connection to New Orleans. Dearborn protested that there was hardly enough traffic for the existing tonnage in the trade, and that small ships could never compete with the large American-Hawaiian vessels.

But when Chesebrough persisted in launching the company, Dearborn moved swiftly. The chief advantage of the new firm was its agreement for divisions of revenue on through freight over Panama: 70 per cent for the Pacific steamers, 16½ per cent for the Atlantic steamers, only 13½ per cent for the Panama railroad. This railroad was owned by the United States government, and its low rate was reportedly due to a desire by the Taft administration to conciliate the California shippers. Dearborn was not without contacts in Washington. A former American-Hawaiian director, George W. Wickersham, was now Attorney-General of the United States; a present director, Henry W. Taft, was brother of the President; both

<sup>13</sup> In January, 1911, Matson offered to buy out American-Hawaiian for \$10,000,000. Although the book value of the company was only about \$7,500,000, the directors turned down the offer.

Wickersham and Henry Taft had been members of the law firm of Strong and Cadwalader, which represented the interests of Sir Weetman Pearson.

Late in 1910, Dearborn wrote to President Taft protesting against the Panama railroad rate, and pointing out the injustice of a government agency charging rates less than cost in order to benefit one competitor in an industry. Soon thereafter, the railroad served a 90-day notice of the termination of its agreement with the Pacific Coast Line; henceforth the railroad demanded 25 per cent of the through rates. By 1912, Chesebrough and Bates were bankrupt.

Meanwhile Dearborn was preparing for the opening of the Panama Canal, which he expected to so reduce shipping costs that American-Hawaiian could capture from the railroads almost all of the slow transcontinental freight. On 15 December 1909, Dearborn wrote to Carey W. Cook, Pacific Coast Manager of American-Hawaiian, that 2,000,000 tons of domestic freight would go through the Canal the first year it was open. If American-Hawaiian were to handle this volume of traffic, it would need a ship leaving New York every two days. This would require 43 steamers outside of feeders. When Dearborn wrote this letter, American-Hawaiian had only 14 freighters in operation.

The ensuing construction program surpassed any other peacetime program in the history of the United States merchant marine. By the end of 1914, American-Hawaiian had added 12 new freighters, each one of more than 9,000 deadweight tons. Fortunately, the company had already fixed upon the technical specifications which best met its needs, so the problem of design for these vessels was minimized. Unlike most of its earlier ships, the new acquisitions all had single screws. The only other novel feature was the new Isherwood or longitudinal type of framing, which had previously been used mainly in tankers. The new technique gave greater longitudinal strength and stiffness, and the ships had clearer holds, with fewer stanchions in the way, than if they had been built with transverse framing.

This expansion program involved two main problems. Under the contract with the Tehuantepec National Railway of 9 May 1905, approval of the railway was a condition for adding ships to the fleet. In view of the clause by which the railroad guaranteed to American-Hawaiian earnings per deadweight ton equal to its earnings in 1904, the railroad was reluctant to grant the necessary permission. George Dearborn used his full powers of persuasion in overcoming this opposition, and he was doubtless aided by the fact that the railroad

had become a heavy stockholder in American-Hawaiian, thereby acquiring an interest in its expansion and profitability.

The second main problem was to find the best means of raising the required capital. The financial strength of American-Hawaiian was shown by its ability to finance its expansion in the 1907-1914 period with only one increase in its stock, with no bond issues, and without resort to investment bankers. In March, 1907, the company created 15,000 more shares of common, bringing the total to 50,000. Of the new shares, 7,000 were sold to the existing stockholders pro rata, and the remainder were sold in 1908 to the Tehuantepec National Railway at \$125 per share. Thereafter the expansion was financed wholly from short-term borrowing. Meanwhile, American-Hawaiian continued to pay annual dividends of \$6.00 through 1909, \$7.00 in 1910 and 1911, and \$8.00 in 1912, 1913, and 1914.

In the spring of 1909, both Dearborn and Lapham were resigned to the idea of paying for the proposed construction by means of a third bond issue, and they actually began negotiations with one of the large investment banking firms. But E. D. Douglas of Williams, Dimond & Company intervened with the statement that American-Hawaiian should be able to meet all bills through short-term commercial credits, renewed from time to time. A canvass of several banks showed that they would indeed be willing to take American-Hawaiian notes at about 5 per cent.

The Maryland Steel Company, which had a large shipyard, also offered to grant short-term credit. American-Hawaiian then signed a contract with this firm for the construction of three freighters, calling for the payment of \$1,000,000 in cash and \$650,000 in twelve 5 per cent notes, maturing monthly, which were ultimately to be converted into 6 per cent, one-year mortgage notes secured by the ships. The arrangement proved so satisfactory that American-Hawaiian gave this company a monopoly on the remainder of its construction program. In September, 1911, a contract was signed for four more freighters on still easier credit terms. The Maryland Steel Company was to receive costs of construction plus a profit of 8 per cent, provided that the total did not exceed \$640,000 per ship. American-Hawaiian was to pay only 5 per cent in cash, with the remainder divided into nine monthly installments. Of these, five were to be paid in cash, while the other four were to consist of 5 per cent, three-month notes which might be renewed three times and might then be converted into 6 per cent, one-year mortgage notes secured by the ships. Similar contracts for new vessels were signed in November, 1911, and in May, 1912.

By the summer of 1912, American-Hawaiian was financing simultaneously the construction of eight ships. Although operating earnings were running at an annual rate of more than \$900,000, the company could not meet all cash installments as they came due, and its short-term notes were discounted with the National City Bank, the Old Colony Trust Company, the National Park Bank, the Hanover National Bank, the Bank of California, and others. The short-term debt of American-Hawaiian reached its maximum in July, 1914: \$2,051,000 owing to the Maryland Steel Company, \$1,550,000 owing to various banks. This was the month in which the Panama Canal was supposed to be opened, and obviously the whole financial program of the company had been planned with this in mind.

In several other ways the company had pointed toward the opening of the Canal. The top executive positions were in some cases divided, and new appointments were made. Carey W. Cook became Pacific Coast manager in 1907, with duties almost equal to those of Burnham. When Burnham retired in 1914, his job as general manager was split into two posts: a superintendent of the line, and a marine superintendent. In 1910, Cook persuaded the company that its increased business had rendered unsuitable the system of leaving its traffic relations in the hands of outside agencies; new local offices were established at the various ports, staffed in most cases by the men who previously had handled American-Hawaiian affairs for the outside agencies.

The company also moved to secure better port facilities. In San Francisco, Cook played an important role in the reconstruction of the waterfront after the earthquake of 1906. The salient features of his plan, which was adopted by the Harbor Commissioners, were construction of two modern steel piers with high headroom, a central control point through which all traffic passed for proper checking, free trucking space all over the docks, and full railroad service on each of the four aprons. When completed, these piers were leased to American-Hawaiian for 15 years, with the company paying the full construction costs of \$350,000. Likewise Roger Lapham, head of the American-Hawaiian office in Los Angeles, secured construction of a 1,000-foot pier in the adjacent harbor of Wilmington. When this pier was completed in April, 1914, American-Hawaiian was ready for the Panama Canal.

But the Canal was not ready for the company. Although the last locks were completed by the end of 1913, new slides started in the Culebra Cut, necessitating extensive dredging. Before this work was finished, trouble broke out in Mexico. Porfirio Diaz, the friend of

Sir Weetman Pearson, had been overthrown in 1911. After General Huerta seized control of the Mexican government, relations between that country and the United States deteriorated rapidly. The crisis came on 21 April 1914, when the United States marines occupied the town of Vera Cruz on instructions from President Wilson. The two countries seemed to be on the brink of war.

This crisis found six American-Hawaiian freighters berthed at Puerto Mexico and Salina Cruz. For a few days, there was doubt that these vessels could escape undamaged from Mexico; and even after they had succeeded in doing so, American-Hawaiian was still in a desperate situation. Having made its plans on the assumption that the Panama Canal would open by then, the company now found that the Canal and the Tehuantepec route were both closed to it. Dearborn made his decision swiftly. On 24 April, three days after the occupation of Vera Cruz, American-Hawaiian announced that it was shifting back immediately to the route through the Straits of Magellan, which would take 20 days longer than the Tehuantepec route but which would not require any rehandling of cargo. On 29 April, the first regular run by the Straits route was begun. The change of route had taken just a week, although it involved the revision of schedules, complicated rerouting of cargoes, provision of oil for the longer voyage, and new problems in navigation for those masters who had never taken a vessel through the Straits.

The remainder of 1914 was filled with disappointments and anxieties. The floating debt of American-Hawaiian looked enormous to Dearborn and his associates, especially in view of the depression in the United States which would render refunding very difficult indeed. On 15 June, Congress repealed the Canal Tolls Act of 1912, which had exempted the American coastal trade from payment of tolls for using the Panama Canal.<sup>14</sup> In August war began in Europe, and the volume of intercoastal traffic slumped even further. When the Canal was finally opened on 15 August, American-Hawaiian promptly began using that route instead of the Straits of Magellan, but by this date the company was carrying freight at the low rate of

<sup>14</sup> This repeal seems to have reflected two types of pressure. It was requested by President Wilson, who was seeking British support for his policy in regard to Mexico and was therefore sensitive to the British protests against the discrimination contained in the Canal Tolls Act of 1912. The transcontinental railroads, fearing a loss of business to the shipping firms, insisted that intercoastal shipping should pay tolls at the Canal.

The Canal tolls, since they are based on the size of the ship rather than on the amount of cargo carried, have been especially detrimental to shipping in depression periods. In 1932, for instance, Canal tolls constituted 13 per cent of the cost of intercoastal voyages by American-Hawaiian ships.



\$5.00 per ton, and it chartered some of its vessels to other companies which were operating in the transatlantic trade.

Thereafter conditions seemed to improve, and on 15 March 1915 Dearborn wrote to Lord Cowdray (the former Sir Weetman Pearson): "Most of the ships that were in competition with us in the Canal business withdrew to take better business in other directions, so that we are now confronted with a small supply of ships and a very large increase in movement of freight. To-day, there are about 20,000 tons of freight on our new pier, inward and outward, 10,000 tons in cars in the yards and aboard ships, naturally at rates very much higher than those we were obtaining at the opening of the Canal."

This happy state proved short-lived. During the spring and summer there were a number of slides in the Canal, and in September both sides of the Gaillard Cut began to slip into the channel. After 13 September no more ships were able to pass through the Canal, and American-Hawaiian — for the third time — began routing its vessels through the Straits of Magellan. By the time the Canal reopened on 15 April 1916, American-Hawaiian had entirely suspended its intercoastal service, and its ships were operating only on war charters.

American-Hawaiian owned a large percentage of all vessels under the U.S. flag which were suitable for war service. At the outbreak of war in 1914, the United States had a total tonnage of vessels large enough for ocean transport of 1,200,000, of which American-Hawaiian had 177,000. Of the 23 United States freighters of more than 10,000 tons deadweight capacity, American-Hawaiian had 16. From 1914 onward, some of the American-Hawaiian ships were chartered to other companies for war service. The next year the company began considering the desirability of abandoning the intercoastal run for the duration of the war. Ocean tonnage became increasingly short, and the burden of moving the transcontinental freight could be shifted to the railroads. The closing of the Canal in September, 1915, meant that ships in the intercoastal run would have to use the Straits route again, which would prolong every voyage by about three weeks. Another factor compelling a decision was that the railroads, overloaded with freight bound for Europe and carrying relatively little westbound freight, placed an embargo on eastbound short-haul freight destined for water carriage to the Pacific Coast. This embargo made it impossible for American-Hawaiian to serve most of its Pacific customers with westbound freight.

Even in the Hawaiian sugar traffic, American-Hawaiian was no

longer indispensable, due to the growing importance of the sugar refineries in California.<sup>15</sup> Therefore, in January, 1916, Dearborn began negotiations with the Sugar Factors to terminate the existing contract. He proposed that American-Hawaiian should carry sugar from the Islands to San Francisco, where that part of the crop bound for the East Coast could be turned over to the railroads. American-Hawaiian would pay the transcontinental railroad freight charges (\$12 per ton) if the Sugar Factors would pay it the regular Magellan rate (\$8.75 per ton). Under this arrangement, American-Hawaiian would suffer a direct loss of \$3.75 per ton plus its operating expenses, but its vessels would be freed for more lucrative use. The Sugar Factors accepted Dearborn's plan on 7 February 1916, and it took effect immediately. In 1916 and 1917, the company used two vessels to haul the sugar crop from the Islands to San Francisco. By 1918 it had ceased serving the run that had called it into being and given it a name.

In 1916, about half the American-Hawaiian fleet was engaged in transatlantic service; by April, 1917, these vessels had carried 100,000 horses and mules plus 500,000 tons of merchandise to the Allies. The remaining American-Hawaiian vessels were chartered for trade with South America: duPont used some to carry nitrates from Chile in exchange for coal; others carried down coal, gasoline, and steel products, and brought back coffee, cocoa, rubber, and manganese ore.

The high charter rates due to the scarcity of shipping carried American-Hawaiian earnings to new peaks. The short-term debt, so menacing in 1914, was completely liquidated in 1916, and the company was able to lend \$3,000,000 to the Texas Steamship Company, a Texaco subsidiary. Dividends were raised from \$8.00 in 1914 to \$15 in 1915, to \$200 in 1916, and to \$395 in 1917.

Even so, George Dearborn was not entirely happy. Writing to Lord Cowdray in 1916, he complained: "Most of our ships have been on time charter, others have been freighting them, so its [sic] making big money with very little effort. Though I must say I enjoyed our trade, which belonged to us and in which I took pride, much more than I do under the present method of doing business." Dearborn was always looking ahead to the day when the company could resume its normal activities. Feeling that vessels of less than 10,000 tons would not be economical in the intercoastal run through the Panama Canal, he sold five of the company's smaller vessels, two to

<sup>15</sup> Of the record-breaking crop of 1915, for example, 285,000 tons — almost the same amount as in 1910 — were carried to the East Coast, while 250,000 tons — nearly 100,000 more than in 1910 — were refined in California.

British interests, three to Norwegian. American-Hawaiian also lost five vessels due to enemy action, so by 1918 its fleet had been considerably reduced.

United States entry into the war in April, 1917, brought immediate requisition by the government of all American-Hawaiian ships (except the two in the Hawaiian run), and by October its whole fleet had passed under government control. But these vessels were turned back to American-Hawaiian for operation, along with numerous ships belonging to other owners — at one period American-Hawaiian had 86 vessels in its charge. During the two and a half years of control by the Shipping Board, ending in late 1919, the regular American-Hawaiian fleet carried a million tons of cargo to the Allied forces, and at the end of the war it brought home 122,361 American soldiers.

World War I ends an epoch in the history of the American-Hawaiian Steamship Company. The firm never returned to the Hawaiian run, which had been so instrumental in its early prosperity and growth. Before 1914, the fortunes of the shipping company had depended almost entirely on the effectiveness of its own organization; after 1918, public policy became the crucial factor, and many government actions altered the situation in the intercoastal trade.<sup>16</sup>

<sup>16</sup> On the difficulties of the intercoastal trade after 1918, see John C. B. Hutchins, "The American Shipping Industry since 1914," *Business History Review*, XXVIII (1954), pp. 105-27.

APPENDIX I  
THE FLEET OF THE AMERICAN-HAWAIIAN STEAMSHIP COMPANY, 1899-1919

Name	Date built	Total deadweight tonnage	U.S. gross tonnage	Bale cubic feet	Builder	Cost per deadweight ton	Disposition
<i>American I</i>	1900	8,850	6,861	376,699	Roach Shipyard, Chester, Pa.	\$61.00	Sold 1926
<i>Californian I</i>	1900	9,088	5,879	375,297	Union Iron Works, San Francisco	49.00	Sunk (by mine) 1918
<i>Hawaiian I</i>	1900	8,850	5,670	376,699	Roach Shipyard	66.00	Sold 1925
<i>Oregonian I</i>	1901	8,850	5,648	376,600	Roach Shipyard	68.00	Sold 1926
<i>Nebraskan I</i>	1902	5,260	4,408	210,400	New York Shipbuilding Co.	90.00	Sold 1916
<i>Nevadan I</i>	1902	5,260	4,408	210,400	New York Shipbuilding Co.	90.00	Sold 1916
<i>Alaskan I</i>	1902	15,062	8,617	602,488	Union Iron Works	54.00	Sold 1926
<i>Texan</i>	1902	13,950	8,594	650,928	New York Shipbuilding Co.	60.00	Sunk (by enemy) 1942
<i>Arizona I</i>	1903	14,183	8,724	612,870	Union Iron Works	53.00	Sold 1928
<i>Mexican</i>	1907	13,800	8,601	648,382	Union Iron Works	61.00	Still in service in 1944
<i>Columbian I</i>	1907	13,200	8,579	614,596	Union Iron Works	61.00	Sunk (by submarine) 1916
<i>Virginian</i>	1903	12,250	9,726	639,530	Acquired by purchase 1907	61.00	Still in service in 1944
<i>Missourian I</i>	1903	13,050	—	679,209	Acquired by purchase 1907	58.00	Sunk (by submarine) 1917
<i>Isthmian</i>	1908	8,430	5,404	380,918	Union Iron Works	62.00	Sold 1916
<i>Georgian I</i>	1910	10,040	6,606	432,165	Maryland Steel Company	57.60	Sold 1916

<i>Kentuckian</i>	1910	9,925	6,479	428,145	Maryland Steel Company	58.33	Still in service in 1944
<i>Honolulu I</i>	1910	9,320	6,582	406,332	Maryland Steel Company	74.83	Sold 1916
<i>Kansas I</i>	1903	12,850	7,913	671,440	Acquired by purchase 1911 from Atlantic Transport Co.	40.80	Sunk (by mine) 1917
<i>Dakotan</i>	1912	10,175	6,537	492,519	Maryland Steel Company	66.00	Title requisitioned by U.S., 1942
<i>Minnesota</i>	1912	10,175	6,617	490,833	Maryland Steel Company	65.65	Still in service in 1944
<i>Pennsylvanian</i>	1913	10,175	6,579	491,084	Maryland Steel Company	70.35	Still in service in 1944
<i>Panaman</i>	1913	10,175	6,535	492,255	Maryland Steel Company	70.29	Still in service in 1944
<i>Montanan I</i>	1913	9,406	6,649	438,154	Maryland Steel Company	73.62	Sunk (by submarine) 1916
<i>Ohioan I</i>	1914	9,920	6,649	438,154	Maryland Steel Company	73.58	Sunk (stranded) 1936
<i>Iowan</i>	1914	10,175	6,529	490,859	Maryland Steel Company	71.95	Title requisitioned by U.S., 1942
<i>Washingtonian I</i>	1914	10,250	6,649	490,858	Maryland Steel Company	71.49	Sunk (collision) 1914
<i>Floridian I</i>	1915	10,315	6,930	461,923	Maryland Steel Company	69.73	Sunk (collision) 1928
<i>Arborean</i>	1916	10,524	5,825	420,903	Maryland Steel Company	51.05	Sold 1916
<i>Artisan</i>	1916	10,524	5,825	420,903	Maryland Steel Company	51.84	Sold 1916

By Theodore F. Marburg

HEAD OF DEPARTMENT OF ECONOMICS AND  
BUSINESS ADMINISTRATION AT  
HAMLINE UNIVERSITY

## A Study of Small Business Failure: Smith & Griggs of Waterbury

« Historians have recorded some of the more spectacular failures in American business, but the subject of business failure in itself has not been intensively studied. To lay the groundwork for such a study, the experience of individual firms should be examined in detail and attention should be directed to small as well as large business units. The history of Smith & Griggs provides an example of "discontinuance" which came about not as a result of a single catastrophic event but by a process of long-time attrition involving every phase of the company's operations.

In what way can business history add depth to our understanding of why most firms cease growing, discontinue, fail, or go into bankruptcy? There are already available a number of careful business histories of firms that were dissolved or were absorbed after incurring heavy losses, and the more spectacular failures of large companies have also been examined by historians of business.<sup>1</sup> These histories are not sufficiently numerous to provide a broad basis for contrast of policy, administration, and ownership between unsuccessful and successful enterprises. More work clearly needs to be done on the history of firms which, for one reason or another, have disappeared from the business scene. In pursuing this line of inquiry the experiences of the smaller companies should not be neglected.

Some guidelines for approaching the study of firms that ceased growing, or failed, are provided by cross-sectional studies encom-

<sup>1</sup> There have been a number of recent historical studies of firms that failed or came so near to failure that they were absorbed, e.g.: Harold F. Williamson, *Winchester, the Gun that Won the West* (Washington, D.C., 1952); Frances C. Hutner, "The Farr Alpaca Co.: A Case Study in Business History," *Smith College Studies in History*, XXXVII (1951); Harold Passer, "E. H. Goff, An Entrepreneur Who Failed," *Explorations in Entrepreneurial History*, I, No. 5 (May, 1949), pp. 17-25; Allan R. Sweezey, "The Amoskeag Manufacturing Company," *Quarterly Journal of Economics*, LII, No. 3 (May, 1938), pp. 473-512; Henrietta M. Larson, *Jay Cooke* (Cambridge, 1931).



passing a number of business failures. The usefulness of such studies, however, is limited where the surveys are confined to firms which were placed in bankruptcy, a relatively small portion of the total discontinuances, and by the need for severely restricting the number of variables taken into account in considering the experience of several companies.<sup>2</sup> The policies and the personality traits of key personnel that lead one in any aggregative tally to characterize a firm as suffering from "inefficient management" may be more fully spelled out, given flesh and clothes, in the history of a single business firm. Completion of further histories of firms that were discontinued or failed may make possible a recasting of the framework for additional studies that will answer critical questions on policy. The present case history of the Smith & Griggs Manufacturing Company, a small metal fabricating establishment which was liquidated in 1936, is submitted as one further study that can contribute toward such an eventual recasting of the critical questions we must ask.<sup>3</sup>

The Smith & Griggs Manufacturing Company was established in Waterbury, Connecticut, during the lush years of the Civil War, to manufacture metal buttons and buckles. Under the early management of John Smith and Henry Griggs the company grew, in seven years, to the point where sales were half those of its chief competitor, the Waterbury Buckle Company. A combination was then effected under which Smith & Griggs became a wholly owned subsidiary of the neighboring firm, with Smith assuming the presidency of both companies.<sup>4</sup> In 1908, Smith & Griggs was disaffiliated from its parent company and once more became independent. This corporate change serves as a convenient division point in the history of the firm.

<sup>2</sup> One study of discontinuances indicates that only 28 per cent were failures in the legal sense. (Ernest A. Heilman, "Mortality of Business Firms in Minneapolis, St. Paul and Duluth, 1926-1930," *Bulletin of the Employment Stabilization Research Institute*, II, No. 1 (May, 1933)). This limits the usefulness of careful studies of the causes of bankruptcy such as Victor Sadd and Robert T. Williams, *Causes of Commercial Bankruptcies* (Washington, Government Printing Office, 1932).

<sup>3</sup> This article summarizes data pertaining to failure assembled as part of a more complete history of the Smith & Griggs Manufacturing Company, scheduled for publication in the New York University Press Business History Series, edited by Professor Ralph Hidy. In the early stages of the larger study assistance was received from a grant made by the Committee on Research in Economic History to Professors Kent Healy and Harold F. Willichsen, for study of entrepreneurship in nonferrous metals manufacture. Acknowledgment for constructive criticism is due these men as well as Professor Arthur H. Cole, chairman of the above committee, and Professor Leland Jenks.

<sup>4</sup> Because corporations were not at that time authorized to hold stock in other companies, the parent firm designated trustees to acquire and hold the Smith & Griggs Manufacturing Co. stock for its benefit.

During the last quarter of the nineteenth century management of the company fell to Edward Smith, oldest son of the co-founder. In spite of adverse business conditions during much of the period, Edward succeeded in maintaining his share of the market, in gradually increasing sales, and in earning some profit in each year. In 1900 Edward was succeeded by a younger brother, Ralph, who managed the firm until 1930, serving also as president for most of the period. After 1930 active management was taken over by Robert Eggleton, who had been brought in by Ralph as a salaried superintendent in 1920.

The peak year for Smith & Griggs' profits was 1910, though sales volume reached its highest point in the war year, 1917. After the war, sales and profits declined. In the 1920's average net sales were only about two-thirds as high as had been the case in the first decade of the century. During most of the depression years losses were sustained which led, in 1936, to dissolution of the firm under pressure from creditors. An orderly liquidation provided funds to meet all the creditors' claims in full and for some distribution to stockholders as well. Since this was clearly a discontinuance rather than a failure, in the legal sense of the term, it is necessary to formulate criteria of success or failure as a preliminary to inquiring into their causes.

Earnings are clearly one measure of business success or failure and, even though not adequate for all purposes of assessment, merit major emphasis by the historian because they command the compelling attention of the businessman. Changes in going concern value and changes in a firm's share of its market constitute additional criteria.

Smith & Griggs' records indicate that during the period of growth from the Civil War to (roughly) 1908 earnings were increasing, although less in dollar magnitude than in the later period, about equal to the later period as a per cent of sales, and yielding approximately the same return on invested capital in both periods. The record of earnings during the years from 1908 to 1930 shows a generally declining trend, with net earnings falling short of dividend payments (see Table 1).

Some measure of change in going concern value is provided by reports on the market value of company shares. For the growth period this is reflected only in reports on the value of shares of the parent company, which rose significantly. For the period of decline the reported value of Smith & Griggs' shares fell.

A statistical appraisal of the company's share of the market calls

**TABLE 1**  
**DATA ON PROFITS, SALES, VARIOUS COSTS AND PROFITS AS PERCENTAGE**  
**OF SALES, AND ON SALES TO LARGE CUSTOMERS <sup>a</sup>**

Year	Earnings (Loss) before De- preciation	Net Sales	Labor (Per Cent)	Raw Materials and Supplies Purchased (Per Cent)	Net Profit (Loss) (Per Cent)	Percentage of Sales to 10 Top Customers
1865	\$ 8,226	\$46,384	27	b	18	73
1866	14,350	72,165	25	b	20	56
1867	(6,718)	57,830	30	b	(12)	41
1868	6,794	75,949	27	b	9	41
1869	10,427	66,414	27	b	16	65
1870	12,052	71,718	28	b	17	60
1871	11,038	93,285	27	b	12	76
1872	32,309	143,745	20	b	22	64
1873	31,625	128,065	24	47	25	68
1874	5,922	77,639	32	40	8	61
1875	3,530	87,473	34	48	4	61
1876	10,752	89,604	33	41	12	70
1877	26,376	112,330	27	37	23	80
1878	19,399	101,173	30	35	19	74
1879	33,835	139,429	28	36	24	80
1880	11,408	123,961	35	48	9	74
1881	11,927	138,460	33	46	9	65
1882	10,928	119,246	35	42	9	82
1883	9,678	108,218	40	34	9	79
1884	8,823	121,111	40	35	7	77
1885	14,059	116,431	41	34	12	76
1886	7,233	138,855	49	35	5	81
1887	4,257	158,456	48	39	3	87
1888	13,675	160,913	46	33	8	89
1889	6,767	187,481	48	37	4	82
1890	19,010	244,443	43	34	8	79
1891	20,997	235,407	43	39	9	73
1892	28,791	271,377	38	46	11	73
1893	20,636	209,229	42	33	9	80
1894	22,597	194,725	44	37	12	86
1895	22,804	206,878	39	39	11	85
1896	9,416	185,938	45	37	5	74
1897	17,551	185,605	43	34	9	72
1898	15,789	165,171	43	34	10	85
1899	32,984	221,020	35	40	15	83
1900	46,798	219,923	35	38	21	85
1901	74,186	271,091	31	39	27	89
1902	87,631	309,286	30	36	28	89
1903	96,045	321,055	29	36	30	93 *
1904	103,825	333,374	29	37	31	92 *

TABLE 1 (continued)

Year	Earnings (Loss) before De- preciation	Net Sales	Labor (Per Cent)	Raw Materials and Supplies Purchased (Per Cent)	Net Profit (Loss) (Per Cent)	Percentage of Sales to 10 Top Customers
1905	105,633	349,763	29	34	30	94 °
1906	98,972	366,933	29	39	27	93 °
1907	110,354	426,311	26	52	28	83 °
1908	117,678	393,688	24	39	30	86 °
1909	133,357	440,839	26	41	30	85 °
1910	134,701	408,529	26	28	33	86 °
1911	99,286	358,926	28	38	28	85 °
1912	84,323	353,598	28	38	24	78 °
1913	60,939	280,874	30	38	22	85 °
1914	44,592	286,774	30	50	16	67 °
1915	47,634	293,726	25	48	16	87 °
1916	55,583	423,654	22	63	13	81
1917	99,882	501,877	21	54	20	90
1918	108,629	430,937	24	40	25	88
1919	95,330	434,550	29	37	22	88
1920	98,745	456,240	32	44	22	85
1921	5,733	217,973	41	25	3	89
1922	20,946	232,314	42	38	9	86
1923	18,826	281,617	36	47	7	77
1924	42,287	312,835	35	50	14	79
1925	35,336	317,965	36	35	11	71
1926	31,628	306,082	35	37	10	77
1927	25,917	269,026	39	34	10	75
1928	16,571	253,850	39	35	7	83
1929	12,016	255,656	38	38	5	76
1930	(12,004)	160,754	56	31	(7)	77
1931	(26,669)	117,048	72	45	(23)	70
1932	(38,975)	98,468	87	25	(40)	76
1933	(18,921)	133,426	68	3	(14)	68
1934	14,537	178,310	54	29	8	75
1935	(22,191)	230,953	51	43	(9)	—

\* The greater part of basic work in reconstructing income statements on a comparable basis was carried out by Mr. Peter Reding with guidance from Dr. Philip Bishop. Earnings are shown before depreciation for the entire period in order that they may be put on a comparable basis. In this series items entered directly into surplus are not included, although they are included in the aggregates of Table 1.

<sup>b</sup> Records not available for 1865-1872.

<sup>c</sup> Ledger for 1903-1915 not available. Gross sales to customers and net aggregate sales are available from journals. The percentages shown for the years 1903-1915, inclusive, therefore compare two quantities not strictly of the same class.

for a more precise delimitation of market boundaries than any aggressive businessman would be willing to accept. A rough statistical measure that is easily computed and which can show direction of change, however, is provided by the ratio of Smith & Griggs' sales to the dollar value of copper (the company's principal raw material) consumed in American industry. In the early years of Smith & Griggs' growth this ratio was high and was not falling sharply; in later years it declined markedly, rising again only during the depression of the 1930's when sales were made at such prices as to incur losses which justified closing up the business.

Verification and explanation of the trends suggested by these admittedly imperfect measures of prosperity must be sought in a more detailed examination of the evolving nature of the firm's business. During the growth years Smith & Griggs filled a niche in the industry as a custom metal fabricator supplying components or small finished products to nationally known firms which sold goods under their own name, frequently covered by their own patents. There were, however, instances of product improvement undertaken by Edward Smith on his own initiative or at the request of these large customers; occasionally the parts or products manufactured were covered by a Smith & Griggs patent. It appears that this small firm, buying in an oligopolistic market, selling to a few large customers, and facing the competition of many other fabricators, was able to show earnings chiefly because of service as an innovator, although this was on a modest scale.

It is true that John Smith, co-founder of the company, Edward Smith, his successor, and Ralph Smith, in his early years as manager, can scarcely qualify as innovating entrepreneurs if the term innovation is used to designate a momentous new change that alters a broad phase of economic activity. No improvement instituted by Smith & Griggs was of this character. Yet the managers and their toolmakers, together with the firm's customers, constantly pictured themselves as working on "a new thing" that would have style appeal, would be more durable or efficient, or could more easily be put into quantity production. Quite clearly, the entrepreneurial, innovating spirit was present.

The process of modest innovation with respect to production minutiae unquestionably had significant cumulative results. Development was most fruitful when the manager was constantly in close and informal communication with both his customers and his production men: in this case, chiefly the toolmakers. If this hypothesis could be sustained for industrial history generally, it might lend added va-

lidity to the current general interest in methods of improving communication. The social, cumulative process by which each small improvement was finally developed bears emphasis. Initial suggestions might come from customers or from the Smith & Griggs toolmakers; some suggestions originated with the manager, especially when Edward Smith held this office. The initial suggestion was merely the beginning of a series of experiments in a true sense, samples often being rejected by the customer who might then suggest alternative experiments. While this give-and-take relationship is something intimately known and vastly important to any man in industry, it tends to be neglected in a business history centering around industrial leaders and the policy-making function.

Whereas in the first period of Smith & Griggs' history management's role was that of an innovating entrepreneur, in the second period the emphasis appears to have changed to that of administering the practice of known procedures in an industrial and market environment erroneously believed to be known and unchanging. Between 1908 and 1930 the service of improving products for customers was performed with less readiness and less effectiveness; fewer patents were taken out by the company; only a small portion of profits was re-invested for the purpose of acquiring new machinery, tools, and equipment.

Suggestive statistical evidence on a divergence of technological practice in the two periods is provided by a comparison of the disposition of company funds. A breakdown of the application of funds, all of which were derived from earnings, is presented in Table 2 for the periods 1872-1907 and 1908-1930. During the earlier span of years 22 per cent of funds went into investment in plant, 14 per cent went into increase in current assets, and 64 per cent was applied to dividend disbursements. In the later period, 89 per cent of funds was paid out in dividends, while 4 per cent was applied to increase current assets and 7 per cent went into investment in plant.<sup>5</sup> In his *Managerial Economics*, Joel Dean has suggested that growth of a firm through re-investment may provide credible evidence of innovation, and the converse is presumably also true.<sup>6</sup> This hypothesis appears to be supported by the contrast in rate of innovation in the two periods of Smith & Griggs' history.

<sup>5</sup> For preparation of source and application of funds statements the author is obliged to Professor Carl L. Nelson, C.P.A. These were prepared from reconstructed income statements and from the corporate records. The reconstruction of income statements was carried out by Peter Reding with guidance from Dr. Philip W. Bishop.

<sup>6</sup> Joel Dean, *Managerial Economics* (New York, 1951), 11.



TABLE 2  
STATEMENT OF SOURCE AND APPLICATION OF FUNDS IN FOUR PERIODS <sup>a</sup>

	1864-1871	1871-1907	1907-1930	1930-1934
Earnings (Includes income items entered directly in Surplus or Surplus Reserves)	\$53,000	\$1,227,000	\$1,316,000	(\$212,000)
Plus depreciation		31,000	160,000	48,000
	53,000	1,258,000	1,476,000	(164,000)
Less dividends	16,000	802,000	1,310,000	20,000
"Earnings" retained in the business	37,000	456,000	166,000	(184,000)
Additional investment by owners	13,000			
	50,000	456,000	166,000	(184,000)
Increase in accounts payable	9,000	(9,000)	8,000	56,000
	59,000	447,000	174,000	(128,000)
Increase in cash	\$	\$84,000	(\$73,000)	(\$11,000)
Increase in receivables	21,000	19,000	( 21,000)	18,000
Increase in inventories	12,000	66,000	( 2,000)	7,000
Increase in miscellaneous assets	<sup>b</sup>	<sup>b</sup>		
Increase in investments	<sup>b</sup>		163,000	(152,000)
Additional investment in plant and equipment	33,000	169,000	67,000	137,000
	25,000	278,000	107,000	9,000

<sup>a</sup> This statement of funds was prepared by Professor Carl L. Nelson, C.P.A., from reconstructed annual reports and from the corporate books. Parentheses indicate loss or decrease. Components do not necessarily add to totals, due to rounding.

<sup>b</sup> Less than \$1,000.

Other and quite marked changes in the company's relations with its customers are discernible between the two periods. In the early years, those relationships were intimate and the company's market was steadily expanded. Stresses and strains, nevertheless, soon developed. Large customers made constant demands for additional and special services, and occasionally insisted that the company refuse to serve their competitors. A break on this issue with one of the largest customers in the late 1890's was one factor in the resignation of Edward Smith, who insisted on maintaining his freedom, and his replacement by Ralph, who was willing to accede to these customer demands. During Ralph's administration agreements were frequently made whereby customers were to buy only from Smith & Griggs and this firm in turn was not to sell to others. Such agreements were not of long-term significance, however, because effective enforcement was difficult. In time the large customers took steps either to provide at least two sources of supply or to fabricate the required metal components themselves. This was feasible whenever the product or process involved was not covered by a Smith & Griggs patent.

After 1908 few new major customers were gained and established customers presently began to give Smith & Griggs an ever smaller portion of their business. Customer correspondence in the period of the firm's decline points up the deterioration in service in the face of competition from others.

In 1908, for instance, Ralph Smith sent samples of a part to A. Stein & Company, of Chicago, an important customer. Stein compared the sample with that furnished by a competitor and wrote:<sup>7</sup>

Not only is yours 20% higher, but is worth 25% less, as it is finished so much poorer. We have been complaining to you bitterly for a long time about your nickel finish but all you do is blame it on the soap.

Faster delivery and dependable shipments of components were demanded by the customers as fabricating activity of firms outside of Connecticut expanded. Customers increasingly referred to earlier, better performance by Smith & Griggs. The manager of C. J. Haley & Company of New York wrote in 1910:<sup>8</sup>

We are having a great deal of trouble of late to get our orders filled with your concern. In fact, more trouble than we have ever experienced before, and these delays are very serious to the success of our business.

<sup>7</sup> A. Stein & Co. to Smith & Griggs Manufacturing Co., 7 Nov. 1908. This letter, and all others not otherwise designated, is from the Smith & Griggs collection on deposit at the Yale University Library.

<sup>8</sup> C. J. Haley & Co. to Smith & Griggs Manufacturing Co., 27 Oct. 1910.

We have always been very loyal to you and have given you everything we could, but the time has arrived when your service to us has deteriorated very much, and in our own defense, we must take on other manufacturers in our goods, unless you can come back to your old time promptness.

This customer enumerated seven items he needed and for which he had sent hurry-up requests by letter or wire, expressing particular annoyance that some buttons, which he had instructed in a telegram should be sent by express, were shipped instead by freight.

A letter in 1916 to George Frost of Boston, a large customer, acknowledged Frost's dissatisfaction with some recent nickel plating and told of a suggestion by the Smith & Griggs foreman that he plate the work longer, although he was at that time putting on heavier plate than ever before. "The only trouble," said Smith, "is that we have not enough brass plating barrels, and it interferes a good deal with our other work, but we will do the best we can."<sup>9</sup> The letter told of inquiries about an imported salt which Smith hoped would help in obtaining a heavier plate without the blue tinge often encountered. Evidently the company had little success in this endeavor, and at the same time was encountering difficulties in applying the protective lacquer coat employed in gilt finishing. A number of apologetic letters cite the "muggy weather" as a factor in the poor finish. "Lacquer acts very differently when it is applied on a hot muggy day," wrote Smith, "as it seems to feel the same as a human being and is very sticky."<sup>10</sup>

Finally, Smith & Griggs practically gave up in their efforts to produce a satisfactory gilt finish. A letter in 1917 confessed that the plating room was "in such shape" that it was impossible to mat gilt any trimmings and asked permission to send trimmings to another company for this work, as had been done the previous year.<sup>11</sup> A 1918 letter to A. Stein & Company advised that firm to continue to get gilt finished work from the Waterbury Buckle Company, "or some large concern like that."<sup>12</sup> There were complaints about the gold plating as well as the gilt, and even complaints about japanning, although these were less frequent.

Experimenting was done less frequently and more reluctantly after the war, resulting, in some cases, in strained relations with large customers. Stein developed an improved garter loop with a rubber pad to protect women's stockings. Smith took the position that this

<sup>9</sup> Smith & Griggs Manufacturing Co. to George Frost & Co., 1 Sept. 1916.

<sup>10</sup> Smith & Griggs Manufacturing Co. to W. T. Robinson, 20 Aug. 1912.

<sup>11</sup> Smith & Griggs Manufacturing Co. to George Frost & Co., 18 May 1917.

<sup>12</sup> Smith & Griggs Manufacturing Co. to A. Stein & Co., 7 Jan. 1918.

was an unnecessary refinement, and such was his reluctance to have machines made for inserting the rubber automatically that Stein went to another firm to have the improved loop manufactured. After the competitor had gotten commercial production of these loops under way, Smith sought and got some orders for them, and he then had a machine developed which was efficient and very satisfactory. When Smith complained that Stein was not buying enough he was told, ". . . it is our belief that if you had made machines for the new loop at the time we wanted you to do so, your business today would be more than twice what it is at present. . . ." <sup>13</sup>

This same unwillingness to meet the demands of increased business is reflected in a letter written in 1920 to the Schaefer Pen Company in which Smith told Schaefer, ". . . our workers only want to work on the goods that they like, and all of your goods are so small [and] fussy that it is almost impossible to get them to work on the goods when they have anything else to do." <sup>14</sup>

Two days later a second letter went out to these same people, in which Smith reviewed his efforts to serve them during the war when metal was in short supply, adding, "It has been our policy to make goods for a few customers and rely on their ability to increase their orders so that we will have a gradual increase. . . ." <sup>15</sup> Smith repeatedly took the position that he was interested primarily in serving his established customers, pointing out that such concentration permitted the firm to avoid high selling costs, which saving was presumably passed on in lower prices to customers. Whether this concentration alone would preserve the company's share of the market, especially if Smith & Griggs' service deteriorated, is a question Smith might well have pondered.

The progressive deterioration of the company's market position points to suggestive differences between the managerial techniques employed by Ralph Smith and by Edward, his predecessor. Edward habitually maintained a close and personal liaison with his shop foremen. He also made weekly calls on the trade in New York and paid frequent visits to customers in Boston and elsewhere in New England. This custom was not for long pursued by Ralph, who had not been in office many years before ceasing altogether to call on the trade, usually allowing company business to clear through subordinate officers. These facts are suggestive, but the conclusion

<sup>13</sup> A. Stein & Co. to Smith & Griggs Manufacturing Co., 18 Jan. 1923.

<sup>14</sup> Smith & Griggs Manufacturing Co. to W. A. Schaefer Pen Co., 17 June 1920.

<sup>15</sup> Smith & Griggs Manufacturing Co. to W. A. Schaefer Pen Co., 19 June 1920.

is not justified that communication deficiency was a unique causal factor in the decline of the firm. Outright managerial indifference to technical improvement and market expansion clearly was a factor.

The difference in attitudes displayed by the two brothers may be explained in terms of their respective backgrounds. Edward went to work for an affiliated brass mill in New York when he was 17 years of age, after training at a business college in New Haven; he took over management during the depression of the 1870's. Ralph started work only after completing his education at Yale University; he took over management at the start of the twentieth century when business was expanding and prosperous. Edward was generally in need of cash; Ralph entered business at a more prosperous time, married well, and gave much attention to managing his investment portfolio.

The degree of participation by the company directors also showed a marked divergence between the two periods of Smith & Griggs' history. Top management decisions in the growth period were reviewed by officers of the parent concern and occasionally by the members of the board of directors, whereas in the period of decline this was not the case. Before 1908 the corporate minutes record instances of board intercession dealing with plant expansion, improvement of accounting procedures after a case of embezzlement, and control over the manager's disbursements at a time when he was under personal financial pressure. Nothing of the sort occurred in the later period. Board meetings in the later years are described by surviving members as having been perfunctory, held to conform to minimal legal requirements. The nephew of a man on the board in the 1920's recalls his uncle's comment that the business was visibly being run into the ground, but that he felt unable to take constructive steps without "causing a family row." Most of the board members, descendants or relatives of the firm's founders or of the family that built up the older parent concern, were active officers of neighboring businesses and were inclined to respect the custom of allowing a president a free hand in shaping policy and regulating operations.<sup>16</sup>

<sup>16</sup> Interview, Elton S. Wayland, 29 June 1948. Since Wayland did not serve on the Smith & Griggs board until 1934, this was based on accounts he heard from his uncle, John P. Elton. The general prevalence, in this period, of boards that filled merely the minimal legal requirements, rather than a policy-making function, is described in John C. Baker, *Directors and their Functions* (Boston, Harvard Graduate School of Business Administration, 1945), 133 ff. Further studies on the same theme bear out this thesis, e.g.: Melvin T. Copeland and Andrew R. Towl, *The Board of Directors and Business Management* (Boston,

The death of Ralph Smith in February, 1930, presented the board members with the opportunity for instituting a change in management which might halt the firm's decline. They were called upon to elect a new president and a new treasurer. Three months passed before the new officers were formally named. In this interval it might have been possible for the board members to review and assess the performance of supervisory personnel at the plant, but no such review was made and the seriousness of conditions at the plant apparently remained unknown to them. It appears likely that during this interval the superintendent continued to perform daily routines without any change in top management guidance or policy.

When the new officers were elected, in May of 1930, a committee was also named to consider whether consolidation with the neighboring Waterbury Buckle Company would be practical. Steps were also taken to have the plant appraised.

The office of president, regarded as equivalent to that of a board chairman, was given to David C. Griggs, son of co-founder Henry Griggs. His holding in the company was considerably smaller than Ralph Smith's had been. He was actively engaged in management of the Waterbury Farrel Foundry and Machine Company and he could give only such attention to the firm's management as might provide top-policy guidance and review. The two posts of treasurer and secretary were filled by Robert Eggleton, who had been in charge of routine operations at the plant in Ralph Smith's later years and had held the office of secretary, assistant treasurer, and superintendent.

During the 1930's the directors made considerably more decisions concerning the firm than they had made in the 1920's. These, however, had largely to do with financial policy and capital structure. The board did not undertake to consider new products or to explore procedures for getting more business or reducing plant costs. Eggleton, in turn, rarely called on customers, and apparently lacked the ability to draw forth and benefit from the suggestions of his tool-makers before making production decisions.

The line of products and the customers to whom these were sold continued much the same as in the 1920's. In the period from 1931 to 1935 there were more year-to-year changes in major customers than had been the case earlier. Also, the three or four largest cus-

---

Harvard Graduate School of Business Administration, 1947). Particularly pertinent as background for the Smith & Griggs problem is, Myles W. Mace, *The Board of Directors in Small Corporations* (Boston, Harvard Graduate School of Business Administration, 1948).



tomers in each year accounted for a progressively smaller percentage of total sales. Half of the total went to only three customers in 1931, to four in 1932, to six in 1933, and to seven in 1934. Thus there tended to be fewer orders for quantities which made possible the economies of large-scale production.

New business consisted either of orders for components or for assembled products. Some parts and components were made for which orders were obtained in competitive bidding. The firm also made an effort to get into the manufacture of finished goods, some of which demanded fine work and complicated assembly. Some production of lipstick and other cosmetic containers had been carried out in the 1920's; in 1934, purchases by a cosmetic company ranked second in volume of sales. In addition, an order was obtained for a fine quality cigarette lighter on which Smith & Griggs was to do the assembly and arrange for gold plating. There were also a number of other orders for assembled items; one for an elaborate re-usable metal paint mixer designed to replace the customary low-cost disposable wooden stick.

The many problems encountered in trying to produce fine quality assembled goods in commercial quantities give added point to Ralph Smith's frequent earlier comment to customers that their work was "too fussy" or too fine for his workmen. Customers complained of delays in production and also of imperfections in the goods. Delays and defects in the goods were occasioned both by production difficulties at the plant and by the failure of other firms to deliver components as needed or exactly according to specifications.

There was no reduction in the outlay for personal services proportionate to the decrease in business. The expenditure for wages and salaries continued in the depression years 1930 through 1934 at 89 per cent of the outlay for 1926 through 1929, even though sales in the later period averaged only half those in the earlier. Management salary payments were reduced as a consequence of Ralph Smith's death and his replacement by David Griggs, whose participation and compensation were nominal. It was the outlay for foremen, operatives, and office help which resisted pruning, or at any rate was not pruned.

Purchases during this period consisted of metal, bought mostly from the American Brass Company; components, purchased mostly from other Waterbury concerns; and the service of plating or finishing, which was performed at such neighboring firms as the Waterbury Button Company. The purchase of sheet stock from American Brass was the largest item, ranging from about \$20,000 to \$35,000

a year. Since the contracts with mills provided that price should be that prevailing at time of delivery, there was no established procedure by which Smith & Griggs could have provided protection against price increases other than buying metal in advance, which would have tied up capital and exposed the concern to the risk of price declines. It may be pointed out that some of the larger industrial fabricators did purchase base metal and arrange for mill service on a toll basis, but it was not customary for the smaller users to protect themselves in this way. During 1934 and 1935 the company fell in arrears on payments for materials, and by March, 1936, owed some \$39,000 to American Brass and smaller amounts to 10 other suppliers.

Financial policy, meanwhile, had undergone some major shifts. In August, 1930, only a few months after Ralph Smith's death, the board of directors voted to write up the book value of machinery and buildings \$50,000 each, which measure they felt was justified since the new book values were still below totals recently assigned by an independent appraiser. The surplus created by this write-up may have helped justify a dividend of 5 per cent the following January despite an operating loss for 1930 of some \$12,000. The January board meeting was held 10 days before that of the stockholders and at this time a balance sheet was submitted which was later entered in the Minute Book, although this had not been previous practice. Two years later, with deepening depression, the write-up was recognized to have been unwise. At the directors' meeting in January, 1933, it was voted: "That the accounting of assets of the Corporation be adjusted by a revaluation such that the surplus will reflect a more accurate value on a conservative basis."<sup>17</sup> A decrease in the par value of the stock from \$100 to \$25 per share had been ratified by the stockholders earlier the same day.

Even the most casual attention to the balance sheets, reported each year at the board meeting, should have made the directors aware of the alarming condition of the company. The continued operation of the firm in the face of large deficits was made possible by using up cash and near-cash assets. The balance sheets show that the holdings of United States government securities were \$105,525 for 1930; \$70,364 for 1931; \$53,000 for 1932; and \$8,000 for 1933. By 1934 this asset was depleted. The savings account balance showed a parallel decrease from \$42,712 for 1930 to \$169 for 1934.

Reports of repeated directors' meetings, together with cryptic references to discussion of general conditions of the company, lead

<sup>17</sup> *Minutes, Directors' Meeting*, 23 Jan. 1933.

one to infer that the decrease in assets as well as the operating losses which occasioned the depletion of assets were evident to the board members and that major policy issues were discussed at board meetings. In 1934 two new directors were added, one of whom was a man of broad experience in the brass industry; he at once began looking rather carefully into the firm's operations and management. By year's end it was reported that at the board meeting, "It was strongly urged that we have an outside audit made on this year's business."<sup>18</sup>

The deep trough of depression was passed, but increases in revenue at Smith & Griggs were soon exceeded by rising costs. In 1934 a favorable reversal replaced earlier operating losses with modest operating earnings. For 1935, however, an operating loss was again reported. This was the more alarming as liquid assets had been used up. The balance sheet for 31 December showed a cash balance of \$421.43, no government bonds, and a savings account balance of \$59. Current assets were less than two-thirds of current liabilities. We may infer the prevailing view as to the firm's condition from the fact that the shares which had been valued at \$50 in 1932 were reported in the local paper as valued at only \$4.00.<sup>19</sup>

It was only after liquid assets were exhausted, in January, 1936, that the directors took a really critical view of prospects. The depletion of the bank balance may well have been a more telling criterion than the firm's failure to earn profits when others were succeeding in doing so. The directors appointed Elton Wayland, vice president of American Brass Company and recently elected board member of Smith & Griggs, as a committee of one to consult with American Brass, the largest creditor. The directors also decided to ask the stockholders to elect only three directors for the year, these to consist of Griggs, Wayland, and Warren Kaynor, who was president of the Waterbury Button Company. One may surmise that Kaynor was added to the board in order that his experience in metal fabricating could be brought to bear on the issue of whether the firm should be revived or permitted to expire. Both he and Wayland visited the factory and they sent production men from their own firms. It was no doubt on the authority of his committee appointment that Wayland, after careful consideration of current operations, prices named, orders booked, and the flow of goods at the plant, wrote

<sup>18</sup> *Minutes, Directors' Meeting*, 26 Dec. 1934.

<sup>19</sup> The first figure is from appraisal of estate of W. P. Bryan, 2 April 1932; Waterbury Probate Records, Inventory, Vol. 239, p. 110. The lower figure is from *Waterbury American*, 4 March 1936. This article reviewed briefly the decline of the firm and closed with reference to the decrease in share value.

Griggs suggesting liquidation of the company. Quotations from this report illuminate significantly the situation existing at this time.<sup>20</sup>

As we get into the situation at Smith & Griggs deeper, we keep finding more reasons why the company has been losing money. It is quite apparent for instance that in their manufacturing operations no real balance exists between the different items which go to make up an order. For instance, the proportion in which different parts of the same article come to the assembly room are such that it is impossible for assembly work to proceed along economical lines.

The order sheet which our men have drawn off shows that this condition exists on almost everything that we have in process today.

Then we find a tremendous liability in old orders which were taken at prices which might have been competitive and necessary during the depression but which certainly are not right today. There is nothing in the world to prevent the customers from calling on the company to make good on these orders as no time limit was stipulated.

Mr. Eggleton and others in the organization, of course, do not agree with us and naturally feel that they are doing as well as anybody could. I thought that we made it as clear as possible at the meeting Tuesday morning that we must gradually reduce operations and cut off expense, but I am very much afraid that unless word comes from you, as president, to that effect, little will be accomplished. . . .

Kaynor feels the way I do about these matters and feels very strongly that expenses should be reduced as rapidly as possible. For instance, our salesman in New York is certainly of no value to the Company, if we are trying not to sell rather than to sell. He should be notified that his employment terminates March first until further notice. The same thought applies to any other representatives the company may have or any one working on a commission. Kaynor has arranged to have an appraisal made by Kelley Brothers so that we will have a check on the value of our equipment and property in case offers are received for it, either in its entirety or piecemeal.

If the stockholders direct us to wind up the business and dispose of the property, I believe we should make every effort to sell it as a unit — good will, unfinished orders and everything, included. Possible bidders would be the Scovill Manufacturing Company, Homer D. Bronson Company and the American Brass Company.

If it becomes necessary to sell the machinery and retain the real estate for the time being, to the above interested parties could be added Blake & Johnson, Waterbury Button and Waterbury Buckle Company.

If, on the other hand, the stock-holders feel that additional capital can be secured through an issue of preferred stock or something of that sort, it should be made absolutely clear to them that they must accept the responsibility for selecting a new organization to run the company if they expect to make any money, as I feel very frankly that there is no one in that plant today who has sufficient brains and physical courage to do the very necessary unpleasant jobs

<sup>20</sup> Elton S. Wayland to David C. Griggs, 13 Feb. 1936. From files of correspondence between Waterbury Button Company and Smith & Griggs Manufacturing Co. made available to the author by Mr. H. William Baer, president of Waterbury Companies, successor to Waterbury Button Company.

which must be done before profits could be expected. We all know how hopeless it is to try and do such things ourselves. . . .

Please forgive me for writing such a long-winded letter but I am trying my best to prove that there is no one in Smith & Griggs today who can possibly pull it out and protect the creditors, and the only possibility I can see for squaring the accounts is to sell what we have for what it will bring, before it is further encumbered and trust to the mercy of the new owner or owners for the welfare of the people who are now working there.

Prompt action followed in the wake of Wayland's forceful letter. At a special meeting of the stockholders on 24 February, the Minutes report: <sup>21</sup>

The President stated that the Officers and Directors had given careful consideration to the affairs of the corporation and were of the opinion that it would be to the interest of the creditors and stockholders of the company to terminate its corporate existence because it does not appear possible or desirable to raise any further capital to continue operations. . . .

As a result, the stockholders voted unanimously:

That the Officers and Directors be authorized to curtail or terminate the operations of the Company from and after this date, to such extent and in such manner as they may deem proper. . . .

A directors' meeting was held 10 days later at which David Griggs was authorized to sign an agreement with 10 creditors. The fact that the formal decision to discontinue business was followed so soon after by an agreement that began with the statement: "WHEREAS, it is desirable to avoid the expense of court proceedings. . ." <sup>22</sup> enables one to infer the true source of pressure for terminating operations. The suppliers of metal and components were unwilling to extend further credit and were apprehensive that the claims they already had outstanding would not be met if the firm continued to dissipate assets by operating at a loss.

Within three months of the formal action authorizing termination of the business, the officers were able to lease the manufacturing building and equipment: both to the Risdon Manufacturing Company, of nearby Naugatuck, under a contract that included an option to purchase. With the signing of this lease, Smith & Griggs terminated its activity as a manufacturing firm. Eggleton resigned as treasurer and the few employees who had been kept on to finish work in process, or for custodial service, were either laid off or hired by the new owner of the factory.

The termination of the firm's corporate existence and the liquida-

<sup>21</sup> *Minutes*, Special Meeting of Stockholders, 24 Feb. 1936.

<sup>22</sup> *Agreement*, 9 March 1936.

tion of company assets were carried out by the directors or under their personal supervision. Over the course of the next 10 years a total of \$33.25 was paid out for each share and the corporation was then dissolved. The relation of the amount finally realized by stockholders to the \$4.00 per share value reported for 1936 provides its own commentary upon the values still inherent in the business and upon the effectiveness with which the termination and liquidation of the business was accomplished.



## *Business History Programs*

AT THE AMERICAN HISTORICAL ASSOCIATION  
ANNUAL MEETING

---

Two programs of particular interest to business historians are scheduled as a part of the American Historical Association annual meeting at the Hotel Commodore, New York, December 28-30, 1954. Both programs fall on December 28, at nonconflicting hours.

**SPONSORED BY THE SHERATON GROUP: 10:00 A.M. ROOM A**

**Topic:** *Sources of Business Leadership*

**Papers:** "The Professionalization of Management," MABEL NEWCOMER, Vassar College

"Engineering Education as Preparation for Business,"  
JOHN B. RAE, Massachusetts Institute of Technology

**Discussion:** Informal

**Chairman:** GEORGE S. GIBB, Harvard Graduate School of Business Administration

**SPONSORED BY THE LEXINGTON GROUP: 2:30 P.M. ROOM A**

**Topic:** *The St. Lawrence Seaway Controversy in its Historical Context*

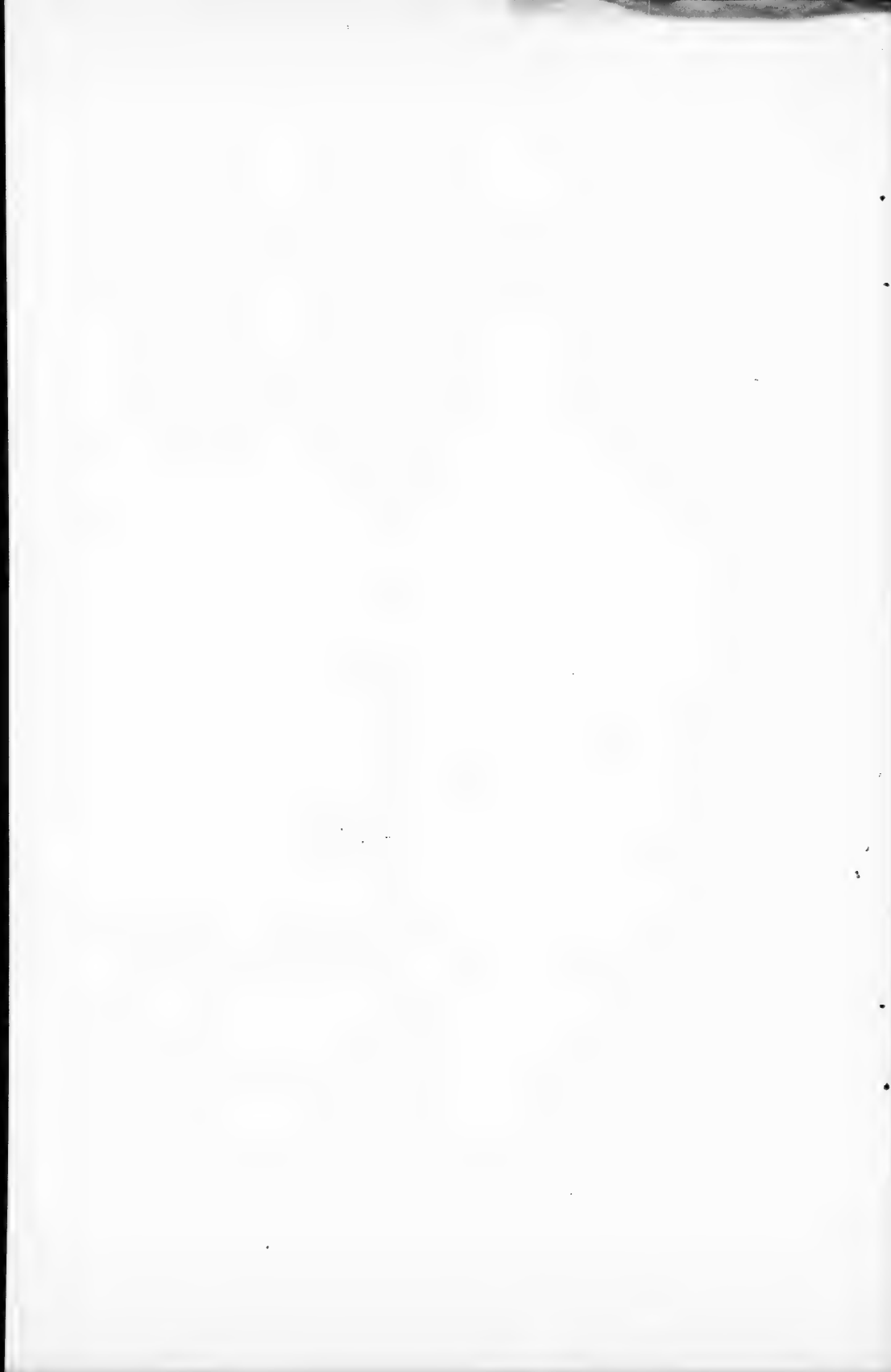
**Papers:** "The Historical Background to 1918," G. WALLACE CHESSEMAN, Denison University

"The Seaway Problem, 1919-1954," WILLIAM WILLOUGHBY, St. Lawrence University

"The Case For," KENNETH HARE, McGill University

"The Case Against," DAVID I. MACKIE, Chairman, Eastern Railroad Presidents Conference

**Chairman:** GEORGE P. BAKER, Harvard Graduate School of Business Administration



## BOOK REVIEWS

*Ford: The Times, the Man, the Company.* By Allan Nevins. New York, Scribners, 1954. Pp. 688. \$6.75.

There is a real danger that many readers will put this book down too soon. The first two hundred pages are difficult to wade through. They are Allan Nevins at his worst, prolix, repetitive, and stylistically unexciting. They do include many significant bits of information and interesting interpretations, especially as to the negative impact of the railroads and the positive effect of the bicycle in shaping the beginnings of the automobile. Yet this material could be greatly condensed and tied in more directly to the main theme of the book — the story of Henry Ford and his company. The nonspecialist would be well advised to read the book's first chapter, the first chapter in Keith Sward, *The Legend of Henry Ford*, and then to go on to Nevins' chapter on the Ford Motor Company beginning on page 220.

From this page on, the story is rich indeed. Even Nevins' predilection for detail can hardly do justice to one of the unique tales in American industrial history. As nearly every schoolboy knows Ford won fame and fortune by designing and producing a low-priced dependable car geared to the rugged driving conditions of the day and produced in vast numbers by revolutionary new techniques. The facts outdo the legend. By a single great innovation, the concentration on production of just one simplified chassis year in and year out, Ford created in an astonishingly short time one of the nation's largest and most profitable businesses. Within a decade of the introduction of the Model N in 1906, Ford's sales rose from just under a million and a half dollars a year to over two hundred million dollars a year; the company's net earnings from about a quarter of a million to something over fifty million a year. By 1916 Ford was building over half the passenger cars sold in the United States. His was the largest business in what had become almost overnight one of the country's largest industries.

Nevins is at his best in describing the development of the mass production techniques that made possible this rapid growth. He reports the changes in industrial plant design first begun at the Piquette factory and then more fully incorporated, under the expert guidance of the architect, Albert Kahn, in the Highland Park plant. He records the significant work of other broadly trained, highly experienced experts like Walter Flanders, Joseph Galamb, Carl Edme and Oscar Bornholdt in designing and improving the multitude of machine tools necessary to break each operation down into its smallest components. Finally, he delineates in detail the work of the company's "master mechanics of managerial ability" in evolving the continuous moving assembly line from the sequential production line and the continuous conveyor belt. The end product of this evolution was fully described long ago by Harold L. Arnold and Fay L. Faurote in their classic *Ford Shops and Ford Methods*. Nevins' contribution is to trace the development of the processes of production that in 1914 made the Highland Park plant the symbol of the modern industrial age.

This evolution, Nevins stresses, was for the most part indigenous to the Ford plants. It resulted primarily from the constant efforts of experts within the Ford plants to meet the production demanded by the insatiable market for the low-priced car. Some methods and machines were borrowed from other manu-

facturers, some gleaned from trade journals and the meetings of professional associations. Few, if any, came from the writings of Frederick W. Taylor and other more articulate proponents of scientific management.

Nevins also describes well the impact of the new techniques on the laboring force. He points to the breakdown of morale under conditions which meant working on constantly repeated routine tasks, at cramped positions among crowded machines and under the incessant pressure of the moving assembly line. The result was an abnormal labor turnover. Ford's response, Nevins argues quite convincingly, was enlightened. Under the supervision of John R. Lee the company adopted a series of well-thought-out progressive labor policies culminating in the five dollar day. These policies were not, Nevins maintains, instituted as Keith Sward has suggested to counter the inroads of the I.W.W. Nor were they initiated in order to assure a docile labor force which would accept a constantly increasing speed-up. The power of the I.W.W., never strong in Detroit, had been broken sometime before the beginning of the five dollar day by the failure of the famous strike at Paterson and by an unsuccessful strike in the spring of 1913 at the Studebaker plant in South Bend. Labor in open-shop Detroit was docile enough in 1914 for Ford to recruit all the workers he needed even with a speed-up by merely paying just a little above the going wage of \$2.50 a day. Incidentally, Nevins' account of the Employers' Association of Detroit and its thorough methods of keeping Detroit nonunionized is one of the book's most useful contributions.

For all its richness of material on production and labor, the business historian will find this book disappointing. Nevins uses the Ford company's business correspondence and records very sparingly. Very few business letters are cited and no balance sheets or accounts are given. The only recorded data to be used with any frequency are the minutes of stockholders' and directors' meetings. Occasionally there is a reference to "Records, Secretary's Office," or "Records, Treasurer's Office." As a result, nearly all the information on the company's business development comes from reminiscences, written or oral, or from court records of legal actions in which the Ford company was involved. Possibly the surviving correspondence and accounts are as scanty as the documentation suggests. Still, Nevins in his introduction does refer to "the resources" of the Ford Archives as "invaluable."

Because the business papers have been little used, many critical questions are left unanswered, or at best only partially answered. The specific responsibility for and the motivation behind such crucial decisions as the five dollar day and the building of a one model, one chassis, cheap car are still uncertain. It would be interesting to know, for example, how much Ford's belief in a cheap car was ideological and intuitive, as both Sward and Nevins emphasize, and how much it was the result of clear understanding of the economies involved in concentrating on the production of a single chassis.

The business historian would certainly like more of the type of information that must have appeared almost daily in the correspondence between the company and its suppliers and dealers. These letters would indicate when and why dealers were dropped and changed; when and why their territories were constricted; and what their response was to the rather highhanded treatment from Detroit. Such letters would also give the details of how the company bargained with suppliers and show just what the discounts were for buying in high quantities and when and why Ford began to make rather than buy his own parts.

As important as correspondence to understanding business policies are a company's accounts. Here Nevins supplies only a few rough or over-all figures, given as appendices. The business historian would like to know what were the components of the company's annual costs, its fixed and running expenses, its sales and its profits. He wants to see the variations in these figures from year to year. How much, for example, did improvements in production cut costs? What geographical areas produced the most sales, which the least? How did the Ford company compute depreciation and make allowances for an especially high rate of obsolescence? Although the data in the appendices indicate that cost figures are unavailable, they do show that sales records exist.

One very significant question which Nevins leaves almost unanswered and on which the correspondence should be most revealing is that of administration. How did James Couzens meet the problems of running a business that expanded its output and sales some several hundred per cent almost overnight? There must have been many headaches. It was true that the highly competent Norwell Hawkins, the company's sales manager and its one-time outside auditor, systematized the firm's administration along conventional departmental lines. Also, the striking innovation of setting up branch assembly plants, like the rapid expansion of branch sales offices, helped to take some of the responsibility for details away from the head office. Nevertheless, Couzens, who until 1915 had sole supervision of everything but production and design, insisted that all decisions of any significance be made by him alone. The amount of detailed and routine work that went across Couzens' desk must have been phenomenal. Yet he rarely bothered to seek expert advice on the organization and operation of his business nor did he even make many sizable additions to his office force. Even though he did have able department heads, compare him with Ford who, in meeting his responsibilities of production and design, hired some of the country's best experts to assist him. After Couzens resigned in 1915, two committees, an executive and an operating committee, were set up to help make decisions on a wide variety of policy matters. But these were short-lived. In 1918 Henry Ford took over the business side of the company, abolished the committees, and managed much in the same way Couzens had done. No wonder Ford had such difficulties when the saturation point in the low-priced car was reached and as competition in the low-priced field increased.

Yet in the early years of the company and the industry, administration and sales were not too important. Design and production were the problems. Once Henry Ford designed and produced his low-priced car, he was assured of an almost unlimited demand. When demand steadily outran supply, what did it matter if administrative methods were inefficient and if dealers and suppliers were exploited? After the First World War conditions in the automobile industry changed radically. Ford's singular failure to meet the new challenges should be one of the most important themes of Nevins' second volume. Even should Nevins be unable to make more use of the company's correspondence and records in the second than he did in the first, the volume will certainly be worth close reading. For the first volume, despite its faults, is one of the very best books on the early automobile industry and certainly the best on the Ford Motor Company. As to Nevins' ability to write a better biography of Henry Ford than Keith Sward did, this will only become clear on completion of the second volume.

ALFRED D. CHANDLER, JR.

*Massachusetts Institute of Technology*

*Biography of a Bank: The Story of Bank of America N.T. & S.A.* By Marquis James and Bessie Rowland James. New York, Harper and Brothers, 1954. Pp. 566. \$5.00.

Among the desiderata for a comprehensive history of banking in the United States are descriptions and analyses of the policies and practices of the giants of the industry in the twentieth century. In *Biography of a Bank*, Marquis and Bessie Rowland James present a fairly inclusive narrative of the activities of the "biggest bank in the world," the Bank of America N. T. & S. A.

Readers will see many different pictures in this narrative. Some will observe the Horatio Alger element, the story of A. P. Giannini who built a giant bank by hard work and diligent pursuit of the idea that "the little fellow" should have a bank to serve his needs. Others will find more interesting that part of the story which deals with the growth and development of branch banking in the Far West, especially in California. The implications of branch banking in the development of the regional economy will and should impress such readers, even though they might not react so favorably to Giannini's ambitions to create a national, even an international, branch banking system. Opponents of Wall Street and Big Government will revel in the fact that Giannini and his son, Mario, fought "the Street" and the Treasury of the United States government to a standstill.

Some students will perceive that the James team has written a story of the democratization of banking in the twentieth century. This came about not only through the bank's encouragement of deposit and loan banking for small farmers and small businessmen; the bank also offered a host of services beyond those usually provided by the banking fraternity. In other words, the Bank of America, particularly under the administration of Mario Giannini, embarked upon a policy of making his institution a department store of banking services. In the course of pursuing this policy, the bank served both large and small businesses, a performance which involved far more than just catering to "the little fellow," so often emphasized by A. P. Giannini in his conversations.

In spite of the multiple facets to this biography of a business, it will not prove entirely satisfactory to many who will peruse it. Careful students of banking will wish for more analysis and less emphasis on dramatic episodes, for more statistical evidence on changes in promotional policies and investment practices. Historians primarily concerned with business administration will note the lack of a clear picture of the methods of managing the giant enterprise, not to mention the relative absence of discussions of day-to-day operations. Though students of entrepreneurial history will find facts to substantiate their theories, they may well perceive that the authors had no particular theoretical frame of reference in mind when they wrote the book.

Extremely critical readers will probably express still more dissatisfaction with *Biography of a Bank*. Some will be convinced that the bank's errors in judgment have been glossed over, though that conviction should be modified by the fact that the authors record many mistakes of the Gianninis and evidently feel that these mistakes have been placed in their proper perspective with relation to the whole story. Business historians will not fail to see the lack of analysis of the difficulties of policy formulation and "routine management" of such a large enterprise, accompanied inevitably by bureaucracy and its attendant problems. That the authors display a marked bias in favor of the Gianninis in their struggles with eastern bankers and the federal government is too obvious to escape notice.



After all the critical evaluations are entered, however, the fact remains that this is a remarkably interesting and valuable book. It is written with verve and makes excellent reading, a factor of importance in reaching the literate public at which the authors aimed their work. The book is based upon extensive research and shows it. There is no evidence that anything of major significance has been withheld from publication and much evidence that the authors were allowed to tell anything that they saw fit to print. With one or two exceptions, the work carries an air of impartiality and objectivity which seems, by and large, to be completely justified by the nature of the contents as a whole. If the business historian or the prospective junior executive will be unable to perceive meaningful policies and operating behavior unless he reads much of the book, he can rest assured that most of the data desired are really there. A bit of analysis and cogitation will reveal to him in simplified form the major policies and practices of the bank founded by a son of Italian immigrants with funds earned in his stepfather's produce business.

RALPH W. Hidy

New York University

• • •

*Arid Domain. The Santa Fe Railway and Its Western Land Grant.* By William S. Greever. Stanford, Stanford University Press, 1954. Pp. x + 184. \$4.00.

This is the sixth study of the land and settlement policies of western railroads that has come out of the seminars of Professors Frederick Jackson Turner and Frederick Merk at Harvard. Previous studies of the Northern Pacific, the Canadian Pacific, the Illinois Central, the Burlington, and the Hannibal and St. Joseph concentrated on railroad promotion policies and the sale, settlement and development of their arable lands. William Greever's *Arid Domain. The Santa Fe Railway and Its Western Land Grant* is not concerned with the Santa Fe's arable land in Kansas or the arid lands of a subsidiary in Texas but deals with a grant given the Atlantic and Pacific Railroad for a line to extend from southwestern Missouri through Indian Territory to California which, had all gone well, might have included 40,000,000 acres.

This imperial grant was whittled away by judicial and administrative decisions and forfeiture until it had shrunk to some 13,000,000 acres in Arizona and New Mexico and a half million acres in Missouri. The acreage in Missouri and a million acres of the grant in New Mexico and Arizona which fell into the hands of the Frisco railroad, like the Santa Fe lands in Kansas, receive no consideration. The remaining 12,000,000 acres along the 35th parallel route from Albuquerque, New Mexico, to Needles, Arizona, which came into the possession of the Santa Fe Pacific, a subsidiary of the Santa Fe, are the subject of the study.

Though the A & P grant is the sixth to be studied, the story of its management, sale, and utilization bears little resemblance to that of any of the others. An arid domain it was, having no land suitable for the usual quarter section farms into which the other grants had been divided. Most of the alternate sections were useful only for grazing but they were interspersed with government sections, Indian reserve sections, state school sections and privately owned sections which made difficult range management, leasing, or sale. Only through exchanges of land and the establishment of solid blocks for forest management, Indian grazing, or private use could areas having this alternate section pattern of ownership in arid regions be given value. Exchange of land absorbed the

attention of railroad officials and was the means by which large returns were exacted from a most unpromising grant.

The Forest Lieu Act of 1897 permitted persons having claims to land within National Forests to exchange them for an equal portion of the public domain outside, regardless of the respective value of the lands being exchanged. Though intended to apply to settlers, the measure was most used by railroads, particularly by the Santa Fe Pacific. Lands that had gone begging for 50 cents an acre were exchanged for scrip which the railroad sold for \$5, \$10 and \$15 an acre to lumbermen, speculators, and townsite promoters who acquired by means of it some of the most valuable timber land left in the public domain. The details of this exchange and similar exchanges of acreage arranged by the Santa Fe Pacific within a national park, Indian reserves, and grazing districts are carefully outlined. Though some of these exchanges were gross frauds on the government the railroad was simply taking advantage of a bad law which the McKinley-Roosevelt administrations permitted to operate even after its scandalous character became notorious.

Professor Greever shows that the Santa Fe was careful in pushing the sale of its lands not to maintain that they were fit for farming but was content to sell or lease them for grazing. To make them more attractive to stockmen some of the lieu scrip obtained from exchanges was used to block out solid areas. Few sales were made of small tracts, except for town lots; otherwise the land was sold in great quantities to livestock interests.

Professor Greever has performed a difficult task well. He writes with restraint and yet is not averse to expressing judgments. He takes the reader through a series of involved corporate changes, legislative deliberations, exchange negotiations, and sales and leasing policies without cluttering up his account with unnecessary detail. He shows that the Santa Fe Pacific and its predecessor, the Atlantic and Pacific, despite the fact that its land grant was one of the poorest, perhaps the poorest given to any railroad, earned through sales and leases a net profit of \$19,623,000 which more than covered the estimated cost of building the line from Albuquerque to Needles and of furnishing it with rolling stock. True, the bulk of this income was not received until the twentieth century when land grant rate reductions were becoming important.

One might wish for more information on the sale of the lieu rights and the land on which they were located and by whom, also for a more detailed account of the tax problem. But these perhaps need separate investigation. Professor Greever has placed all students of railroad land grant policy and more broadly of western history under heavy obligations for his enlightening account.

PAUL W. GATES

Cornell University

• • •

*Planter Management and Capitalism in Ante-Bellum Georgia: The Journal of Hugh Frazer Grant, Ricegrower.* Edited with introductory chapters by Albert Virgil House. New York, Columbia University Press, 1954. Pp. xvii + 329. \$4.75.

*Rice Planter and Sportsman: The Recollections of J. Motte Alston, 1821-1909.* Edited with an introduction by Arney R. Childs. Columbia, University of South Carolina Press, 1953. Pp. xviii + 148. \$4.50.

The idea that the southern ante-bellum agricultural economy consisted entirely of huge cotton plantations supported by the one-crop system and dominated by mint julp Cavaliers living in white mansions surrounded by magnolia trees from which whippoorwills chirped sweetly evermore has been pretty well discredited. These oversimplifications were shattered by such scholars as U. B. Phillips, Avery Craven, William Dodd, E. M. Coulter, L. C. Gray, E. E. Edwards, and others who revealed some of the complexity and divergence of the planters' economic and social life.

Now, the significant volume, *Planter Management and Capitalism in Ante-Bellum Georgia*, gives added perspective to the story. Albert V. House has edited the Hugh Frazer Grant journal and written four classic introductory chapters.

These journals and account books running from 1834 to 1861 provide basic information for the book. Hugh Grant in 1833 inherited 195 slaves and a 750-acre rice plantation on the banks of the Altamaha river in Georgia. By careful management the estate prospered until in 1850 it was valued at almost one hundred thousand dollars. Grant's journal is spotty, with some years containing few entries. The data is often fragmentary, repetitious and dull. Laconic comments such as "heavy rain," "rice looks good," and "cut ten acres," are not particularly illuminating, but other items referring to the work of the slaves in cultivating the soil and controlling the floods from nearby rivers have more substance.

Fortunately, Albert House has written an excellent analysis of the superintendence of a typical rice plantation. After meticulous research he discusses the ownership of rice lands, control of water resources, harvesting techniques, and the milling and marketing of the crop.

The editor compares the business activities of the rice planter-entrepreneur with that of the manufacturer of the day. Both had fixed locations, the industrialist finding it difficult to move his factories and the planter unable to leave lands which depend upon the tides for water. Both searched for capital, for long-term credit, for efficient managements, for better markets, for lower transportation costs, and for added profits. Likewise both business enterprises depended upon factors, commission houses, insurance agents, bankers, and a host of other middlemen.

House insists that the rice planters did not make the big money, nor did the middlemen in Savannah who handled the grain. It was the outside interests controlling supplies, credit, and prices who reaped the profits. As the writer states, "These interests called the tune, and the Georgia rice trade had no alternative but to continue in a species of economic servitude."

Additional evidence showing that there was a difference between rice and cotton plantations is found in *Rice Planter and Sportsman: The Recollections of J. Motte Alston, 1821-1909*. Here, Arney R. Childs, editor of the reminiscences, describes the fabulous Alston rice plantation in South Carolina as being more lucrative than a comparable investment in cotton.

Both Alston and House contend that rice producers tried to become more self-sufficient by diversifying crops, raising more livestock, and acquiring a versatile labor force. Both writers know how to raise a good crop of rice. Unfortunately they fail to give adequate descriptions of the threshing, milling, and power machinery employed.

However, the two books disagree as to the manner in which the plantation

economy functioned. House sees the rice grower heading a business enterprise as an integral link in a long chain of business organizations. He is not independent for he must rely on all the business agencies which provide capital, manufactured goods, market facilities, and the other innumerable services required in the maintenance of plantation life.

J. Motte Alston, on the contrary, in nostalgic fashion recalls his planter days as a prewar utopia. As an independent lord of the manor he boastfully insists that "I never failed in what I undertook." He recalls the good old halcyon days when his investments reached \$135,000 and his 1,000 contented slaves, devoid of personal problems, lived in what must have been blissful happiness. As a gentleman, Alston could enjoy his leisure at gay parties, or as a sportsman hunt ducks and deer near the Waccamaw and Pee Dee rivers. With wealth he retired to Columbia only to have his comfort disturbed by Sherman's careless use of matches and the horrors of the Reconstruction era.

Obviously, Alston writing in his seventies chose to remember only his pleasant experiences. In spite of this option, however, the book has great value. It is written with charm, sprinkled with delightful anecdotes, and filled with keen observations. There is much to interest the student of social history searching for additional insights into the mind of the southern gentry.

REYNOLD M. WIK

Mills College

• • •

*The House of Morrell.* By Lawrence Oakley Cheever. Cedar Rapids, Iowa, The Torch Press, 1948. Pp. xi + 303.

The title of this history of John Morrell & Company, founded in 1827, is borrowed from that of an earlier and briefer account given before the Newcomen Society by T. Henry Foster, a collateral descendant of John Morrell and head of the House for a quarter century. The title was well chosen, for the firm was the family; and Foster was well chosen to represent the House of Morrell, for his life span overlapped that of John Morrell and his service with the firm had amounted to nearly sixty years. Foster's tenure typified the persistence of family control in an industry dominated by founding families.

The full-length history, published by the company, was written by the editor of the company's house organ *The Morrell Magazine*, in which it had appeared in serial form. This attractive book, with striking illustrations by Elmer Jacobs, was distributed by the company to stockholders, to other interested persons, and to libraries in states where the company had plants.

Written for the audience reached by the company magazine, the book deals rather sketchily with many points of interest to students of the development of business philosophies, policies, and practices. Yet it is of particular interest to business historians because of the long life of the firm and the continuity of family direction. The inclusion of old records and documents has given substance to the account of the firm's changing form and growth.

Originating in England, John Morrell & Company established a branch in the United States at the close of the Civil War. This extension of an already going organization antedated the start of most of the other major United States meat packing companies. The Morrell Company went on from this point to become one of the foremost "independent" packers in this country, proving its ability to compete successfully against the rising "big" packers.

The humble — and almost accidental — founding of the British parent firm is described by Cheever in some detail, but principal interest focuses on the development of the American branch. Little is told, however, of how John Morrell, one of four sons taken into their father's business, rose to dominate the family group and find the capital required to buy sole ownership and finance expanding operations. In fact, throughout the book financial information is meager. Almost continual growth is recorded, presumably financed by reinvested capital and short-term bank loans, but there are only scattered references to size in terms of capital investment. At one point the author suggests that the firm was habitually plagued by shortages of working capital; yet it did not seek outside funds through a stock issue.

John remained the controlling owner until his death in 1881, when he left his equity to four nephews, since he had no children of his own. The company remained a closely held corporation until 1928, but during this period some opportunity was provided for employees to obtain shares. When the first public stock offering was made there already were over 1,000 stockholders. How this policy of employee shareholding was implemented, how control was preserved in the family, how shares were distributed among the family members, and even the details of the complicated evolution of the corporate structure are not fully clarified.

After its early years as a provision merchandizer, the company began a backward integration into control of its source of supplies of meats and finally into meat packing itself. It was this search for supplies that had led the firm to send representatives to the United States. Having thus eventually chosen the field in which it was to concentrate and become so well established, the management continued to show its pioneering spirit by finding new methods of operation, building new and efficient plants, and making use of newly discovered applications of power.

It is not surprising that the management of a firm that had grown chiefly through the enterprise of the members of one family and whose net worth had grown from a few hundred dollars to nearly thirty millions chiefly through reinvestment of earnings should chafe against growing government regulation and the demands of labor for recognition. It took a firm stand when government control threatened, and while it had its share of labor disputes, it also inaugurated many generous benefit programs.

What Cheever tells us about Morrell is worth reading, and it is good to have for reference the general outline of the firm's progress. We can only regret that there are important gaps in the outline and that more detail is not presented about the managerial methods of a distinguished industrial dynasty.

MARIAN V. SEARS

*Harvard University*

• • •

*A Man with Clay Feet.* By Kenneth McM. Dickey. Kansas City, privately printed, 1953. Pp. 48. \$2.00.

A short biography of a leading middle western manufacturer of clay (sewer) pipe. Walter S. Dickey (ca. 1860-1931) left Canada in 1885 to enter the Kansas City Sewer Pipe Company in which his father owned a minority interest. Quarreling with the dominant owners, young Dickey bought out com-

petitors and entered business for himself. By 1905 Dickey was reputed to be the largest (\$9,000,000 annual sales) clay pipe manufacturer in the country with plants (acquired by purchase) scattered through the Middle West and South. His properties were all owned outright with no partners or other shareholders. His success was reportedly due to skillful handling of freight differentials.

In 1921-22 Dickey purchased the *Kansas City Journal* and the *Kansas City Post* to do political battle with the *Kansas City Star*. His publishing venture proved financially disastrous, too much for the diminishing profits of the clay pipe business to carry. A \$425,000 bond issue managed by the Harris Trust Company of Chicago provided insufficient funds and in 1930 Dickey was thrown into bankruptcy by defaulting on a loan from the Old Colony Trust Company of Boston.

Though written by a son, the tone of this biographical sketch is highly critical and the language intemperate. Its usefulness to historians lies in the leads it provides and not in the statements it makes.

THOMAS R. NAVIN

*Harvard University*

• • •

*A Century of Banking in Wisconsin.* By Theodore A. Andersen. Madison, State Historical Society of Wisconsin, 1954. Pp. 226. \$4.00.

This study is, without question, a valuable contribution to the records of the State Historical Society of Wisconsin for it does give a broad picture of banking in that state in its first hundred years of operation. As with any broad picture, to appreciate it one must back away some distance. The first reading gives the impression of too little organization to cover such a large canvas; the blank spots show through in some places while the detail is too apparent in others.

Obviously there has been adequate original research, but in many places the reader wonders why particular situations have been dealt with so completely, which leads him to wonder about parallel situations which he imagines must have been existing. Better presentation would have made more entertaining reading for the general student of Wisconsin history. As it stands, this study would appear to be interesting only to bankers or students of banking.

All who read it will put it down completely satisfied as to the immense advantages which the establishment of the Federal Reserve System created for bank customers.

Those who open up new territory must be gamblers. They take great risks for expected great rewards. The moneylenders who were in Wisconsin in the early days were not only gamblers, but as bankers obviously unintelligent, and, this book leads us to believe, crooks, to a man. As time went on banking, including deposit of funds in addition to mere moneylending, began to develop and to take on some resemblance to the modern banking system. However, we gather that great profits were expected or hoped for from banking as from any of the enterprises in this growing territory. The banks or the private bankers were operating on a shoestring, being large borrowers themselves in order to satisfy the demands of their customers. Too often, through friendship,



or lack of judgment or worse, credit was extended in places or in amounts wholly unjustifiable.

These early bankers had great mortality in normal times and failed in droves in periods of nationwide financial troubles.

It took an abnormally long time for the great majority of Wisconsin bankers to look outside their own state and see, from the example of banks in older sections of the country, how banking must be conducted in order to insure survival during serious depressions.

A few enlightened individuals, later the State Banking Association, pressed for regulatory legislation, but it was slow of passage, and from our position today some of it, at least, seems to have been poorly thought out. Probably many of the early statutes represented the best compromises that could then be effected. However, from small beginnings in the early nineties Wisconsin gradually built up a satisfactory series of banking acts; by the time the Federal Reserve Act was passed, Wisconsin was as good a banking state as any of similar economy.

Today, of course, Wisconsin banks and bankers rank high, but one feels, after reading *A Century of Banking in Wisconsin*, that the path to this eminence has been more tortuous than has been the case in some other sections of the country.

L. M. LITTLE

Boston, Massachusetts

• • •

*A Merchant Prince of the Nineteenth Century: William E. Dodge.* By Richard Lowitt. New York, Columbia University Press, 1954. Pp. xii + 384. \$5.00.

Although this study of William E. Dodge bears the title, *A Merchant Prince of the Nineteenth Century*, it is, in fact, much broader in scope than the life of one man. About half of the book deals with the New York firm Phelps Dodge & Company and their Liverpool house Phelps James & Company.

The author, basing his findings to some extent on business records, has presented material on business organization, practices, and policies. Particularly for the period of the 1830's to the Civil War he gives considerable information about customers, credit terms, sources of supply, insurance and cotton dealings, and methods of financing international trade. Emphasis is placed on the firm's efforts to adapt its business to the fluctuations of the business cycle.

To many students of the period, the glimpses of Dodge's father-in-law, Anson G. Phelps, senior partner of the firm up to the time of his death in 1853, will have special interest. Phelps, the energetic, speculative partner of the metal firm which dominated the American tin-plate trade in the nineteenth century, is contrasted with his son-in-law Daniel James, cautious manager of the Liverpool house, and with his son-in-law Dodge in whom the author considers "caution and the spirit of adventure" are nicely blended.

Typical merchants of their day, the individual partners as well as the firm put capital into many outside interests. These interests included vast timber holdings, real estate, railroads (except those which did not observe the Sabbath), and a controlling interest in the Union Bank at Dover, New Jersey. Both the firm's capital and Anson Phelps' personal direction were invested in metal manufacturing enterprises. The beginnings of the firm's concern with copper

mining, the major interest of Phelps Dodge & Company today, is just touched upon.

From 1853 until within a few years of his death in 1883 Dodge was senior partner of Phelps Dodge & Company, the largest importers of metals in the United States. Profits mounted. Anson G. Phelps left a fortune of about two million dollars; Dodge's amounted to an estimated ten million.

But Dodge concerned himself with much besides profits. His money and influence were put to work on behalf of the temperance cause, the fight against municipal corruption, the welfare of the Negro, and improved treatment of American Indians. Among the many philanthropies of this Christian merchant were foreign missions, the American Bible Society, and theological seminaries.

Business and philanthropies did not exhaust the range of Dodge's activities. As a member of the 39th Congress he was faced with Reconstruction problems, the Greenback question, and the tariff; and as president of the Chamber of Commerce of the State of New York he worked for the mercantile interests in the fields of currency and transportation.

It is as a type that the author considers Dodge important. He was "one of the last examples of the men who dominated the mercantile life of New York from Colonial days to the Civil War. . . . These men were God-fearing citizens, who, without any pretensions to superiority, observed in an unobtrusive way a high standard of dignity and integrity in most of their business relations. They were not primarily concerned with amassing great fortunes, and according to modern standards they were not rich. Their goal was, rather, to lead simple lives, to attend to their business, and to occupy much of their leisure time with the various public, religious, and philanthropic enterprises in which they were interested and to which they gave liberal contributions."

ELVA TOOKER

Mary C. Wheeler School

• • •

*From Mine to Market. The History of Coal Transportation on the Norfolk and Western Railway.* By Joseph T. Lambie. New York, New York University Press, 1954. Pp. xviii + 380. \$6.00.

Dr. Lambie has made a notable contribution to both railroad and business history in this study of the Norfolk and Western. The romance of railroading so thoroughly permeates railroad literature that we sometimes forget that a railroad is a business organization and an economic force of the first magnitude. This aspect of the subject is forcefully developed by Dr. Lambie. True, the Norfolk and Western is a highly specialized system, depending on bituminous coal for almost three-fourths of its freight tonnage, but this circumstance has proved extremely useful in facilitating a detached and intensive analysis of the relationship between the carrier and its traffic.

It has been far from a simple relationship. If the prosperity of the Norfolk and Western has depended upon the Pocahontas coal fields, it is equally true that the prosperity of the coal fields has depended on the Norfolk and Western. Coal from southern West Virginia had to find a market in competition with the northern bituminous fields, which had a shorter haul to both the eastern industrial centers and the Great Lakes shipping points. Consequently, while the Norfolk and Western, the Chesapeake and Ohio, and later the Virginian

were rivals for the West Virginian coal traffic, they had a common interest in enabling the mines of this area to meet the stiff regional competition that existed in bituminous coal. The resultant rate-making policies and the unsuccessful attempts at pooling the bituminous traffic are thoroughly explored by Dr. Lambie.

In the course of developing its business the Norfolk and Western had to do a number of things besides haul coal. It became the principal owner of coal land in the Pocahontas area, set up an inspection system to maintain quality, and for a time was the marketing agent for the output of the Pocahontas field. It also worked out a system for handling the vexatious question of car supply which appears to have been reasonably equitable.

In short, we have here a comprehensive picture of a complex business operation, which could be profitable only if a delicate balance among several factors was successfully maintained: the amount of coal mined, the market conditions, the cost of production, and the cost of transportation, to name the most obvious.

That this objective was largely achieved is a tribute to the management of the Norfolk and Western, and particularly to Frederick J. Kimball, the dominating figure in the company's history. Kimball presents an interesting combination of talent: trained in engineering on the Pennsylvania and London and Northwestern railways and in finance as a partner in a Philadelphia banking house. It appears to have been mainly his insight that converted the Norfolk and Western from a local line in Virginia, hauling chiefly cotton and tobacco, into the coal carrier that it is today. He offers an attractive study in entrepreneurship.

It would be most useful now if we had comparable studies of other bituminous carriers, particularly the Chesapeake and Ohio, which taps virtually the same region as the Norfolk and Western, in order to determine whether the latter's methods of developing its coal business were typical or unique. Dr. Lambie necessarily has some references of this sort, but in the nature of things he could not be expected to deal in detail with the other railroads.

What he has done with the Norfolk and Western is sufficiently impressive. The railroad company on its side deserves the thanks of the historical profession for the way in which it opened its records to the author. If one minor criticism of the book may be offered, it is that putting all the maps in one place makes it inconvenient for the reader to keep track of where he is geographically. There is never a map with the chapter he is reading — he has to go forward or back to the middle of the book. But this is a small price to pay for the wealth of information that is offered.

JOHN B. RAE

*Massachusetts Institute of Technology*



## ***Books Reviewed - continued***

- Lawrence Oakley Cheever, *The House of Morrell*. Reviewed  
by Marian V. Sears . . . . . 394
- Kenneth McM. Dickey, *A Man with Clay Feet*. Reviewed by  
Thomas R. Navin . . . . . 395
- Theodore A. Andersen, *A Century of Banking in Wisconsin*.  
Reviewed by L. M. Little . . . . . 396
- Richard Lowitt, *A Merchant Prince of the Nineteenth Century*:  
*William E. Dodge*. Reviewed by Elva Tooker . . . . 397
- Joseph T. Lambie, *From Mine to Market. The History of Coal  
Transportation on the Norfolk and Western Railway*.  
Reviewed by John B. Rae . . . . . 398

# **The Business History Review**

**A quarterly journal specializing in the history of business**

*Development of administrative methods*

•

*Roles of management and labor in industrial expansion*

•

*Growth of business functions,  
such as marketing and investment banking*

•

*Relation of business attitudes and actions to social change*

•

*Biographies of leading businessmen*

•

*Histories of important business firms*

**For further information, write to THE BUSINESS HISTORY  
REVIEW, 217 Baker Library; Soldiers Field; Boston 63,  
Massachusetts.**